



# Solid Waste Management Plan Update 2009

June 2009



Guilford County

PLANNING & DEVELOPMENT DEPARTMENT

*Solid Waste Program*

# Solid Waste Management Plan

## 3-Year Update



Guilford County,  
North Carolina

*Archdale, Gibsonville, Greensboro, Guilford County, High Point,  
Jamestown, Oak Ridge, Pleasant Garden, Sedalia, Stokesdale,  
Summerfield, Whitsett*

June 2009

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### Introduction

This Solid Waste Management Plan Update (Update 2009) discusses the current solid waste practices used within Guilford County (County) and possible changes that can be made to improve solid waste management and to reduce solid waste generation over the next ten years. Plan updates will follow at least every three years to allow for improvements and continuous monitoring of the Plan implementation. It is the intention of the municipal representatives who have participated in this planning process to continue to meet regularly and further develop and implement strategies for waste reduction and for future solid waste management alternatives. In light of the current state of the economy, a great deal of emphasis will be placed on providing the maximum benefit and level of service while using the least amount of public funding possible. The County and its municipal planning partners have agreed that using solid waste disposal tax distributions to help maintain existing programs and services would be the best course of action. Recommended enhancements to these existing programs, as outlined in Update 2009, will be accomplished largely through the use of staff time and expertise and will focus on public outreach and education.

The planning area includes Guilford County and the following municipalities: Archdale, Gibsonville, Greensboro, High Point, Jamestown, Oak Ridge, Pleasant Garden, Sedalia, Stokesdale, Summerfield, and Whitsett.

### Planning Area Goals

Guilford County's long-term goal is to help reduce waste generation within the County and participating municipalities. The County and its municipal partners will strive to educate the entire community about solid waste and recycling, and to make solid waste disposal and recycling easy and accessible to everyone. The realization of these efforts will prevent improper waste disposal and provide greater protection for the public health and for the environment. Our goals are summarized as follows:

- ❑ Goal 1 – Develop a Solid Waste Management Plan that is in conformance with state requirements and with local objectives.
- ❑ Goal 2 – Identify any deficiencies in existing solid waste management programs and systems that must be addressed in order to meet local needs and provide protection for the public health and for the environment.
- ❑ Goal 3 – Develop local reduction goals and programs for Guilford County.

- ❑ Goal 4 – Develop and implement a comprehensive, ongoing public education program and encourage public participation in the long-term planning process.
- ❑ Goal 5 – Continue the solid waste management process so that the feasibility of future options can be thoroughly investigated, and recommendations based on those investigations can be presented to the participating jurisdictions for review and adoption.

### Waste Quantities and Composition

Guilford County and its municipalities disposed of approximately 630,000 tons of waste in Fiscal Year (FY) 2007-08 (North Carolina Division of Waste Management), not including yard debris or recyclables. The County and municipalities actually managed a total of approximately 720,000 tons of waste including recyclables (43,000 tons) and yard waste materials (40,000 tons) that were diverted from landfilling. Of the total tons of waste managed for the County, it is estimated that 29 percent is residential, 26 percent is commercial waste, 23 percent is industrial waste, and 22 percent is construction and demolition (C&D) waste.

### Waste Reduction Goals

In 2006, Guilford County and its municipalities established a local waste reduction goal of 0% to be reached by FY 2012-13 and to be maintained through FY 2018-19. In FY 07-08, the County has gotten to within 1% of this goal by achieving a 1.37 ton per capita rate. However, this reduction in waste may be due, at least in part, to the sharp decline in the economy that has been seen so far in FY 08-09.

Upon analysis, the County and its municipal planning partners have identified several factors that have contributed to this recent reduction in the County's solid waste tonnage. They are as follows:

- ❑ State ABC recycling mandates.
- ❑ Greater public interest in “green” issues, including waste reduction and recycling.
- ❑ Increased availability of recycling opportunities for residents and businesses.
- ❑ Expanded public education efforts.

Upon careful consideration of the above items in conjunction with future waste reduction estimates, the updated reduction goals for Guilford County and its municipal partners are as follows:

◆	FY 2012-13	0%
◆	FY 2018-19	0%

To achieve the goal of 0 percent per capita waste reduction in FY 2012-13, Guilford County must modify its per capita disposal rate to 1.35 tons. Based on population projections and using the new per capita rate, the County's future landfill disposal should be limited to 665,775 tons for FY 2012-13 and 713,875 tons for FY 2018-19.

### **Assessment of Programs and Services**

Through the following efforts, Guilford County and its municipalities will make progress towards meeting the goals established within this Solid Waste Management Plan Update.

- **Waste Reduction** – The County and its municipal planning partners intend to develop policies that will reduce the toxicity of chemicals being used by government agencies and facilities and will encourage deconstruction instead of demolition in redevelopment projects. Current efforts to disseminate information to the public about waste reduction will be expanded to include more web-based content and additional outlets for distribution of the Guilford County Solid Waste Services Guide.
- **Collection** – Guilford County currently licenses private residential collection services to operate in the unincorporated areas and smaller towns. The County, along with its municipal planning partners, intends to develop and present for adoption a policy requiring licensed garbage collectors to provide recycling collection, with minimum standards, and yard waste collection as part of their license to operate. This policy would support state landfill bans and increase the County diversion rate. The City of Greensboro will investigate revising its current bulk collection procedure from a route to scheduled collection. The City of High Point will evaluate the possibility of reducing the frequency of various elements of its curbside collection program. These measures, if enacted, could result in significant energy and cost savings.
- **Recycling and Reuse** – Recycling rates for the entire County remain unpredictable. In 2008, the state announced a new goal of 2 million tons recycled annually by 2012. In order to reach this goal, the Division of Pollution Prevention and Environmental Assistance (DPPEA) has calculated Guilford County must increase its per capita recycling rate of 337.18 pounds by 114.27 pounds, or 34%. Because of current economic conditions, the County and its municipal planning partners intend to focus on education and outreach efforts to increase the diversion rate, using available staff time to replace dollars when possible. With new landfill bans becoming effective in 2009 and 2011, extensive public education is vital and is beginning now. To achieve a successful implementation of these bans, County staff will work with local recycling centers in an effort to ensure that all rigid plastic bottles will be accepted for recycling and not considered contamination. The City of Greensboro/ Guilford County residential household hazardous waste disposal program will continue to accept electronic waste,

including computer equipment and televisions, for recycling and disposal. In addition, County staff will continue to work with schools to encourage administrative and classroom recycling and provide assistance in the implementation of a recycling program.

- **Composting and Mulching** – The Cooperative Extension Service at the Guilford County Agricultural Center promotes residential backyard composting and vermi-composting, and sponsors residential composting classes and other yard waste reduction, recycling and education programs. Two successful municipal composting facilities are in operation in Guilford County. In FY 2007-08, the Cities of High Point and Greensboro recycled approximately 26,000 tons and 13,000 tons of organic materials at their respective facilities. Guilford County continues to operate a Christmas tree recycling program, and makes mulch and compost available to residents through the sheriff's prison farm. To help increase public awareness of locally produced compost and mulch, the Greensboro, High Point and prison farm locations will be promoted on the County and municipal websites. Municipalities will continue to work toward adding yard waste collection to their franchise agreements, in order to ensure convenient yard waste disposal for their residents, to help increase diversion rates and to reduce burning.
- **Disposal** – In FY 06-07, the City of Greensboro eliminated the disposal of MSW at the White Street Landfill in conjunction with the opening of a transfer station that transports MSW to Republic Services' Uwharrie Environmental Landfill. The City of High Point's Kersey Valley landfill, now the only operating MSW landfill in Guilford County, has ample disposal capacity for the planning period at its current disposal rate. Republic Waste began operation of its MSW transfer station for transporting waste to its Uwharrie Environmental Landfill in Montgomery County in FY 04-05. Life expectancy of this facility is not entirely predictable, and the County and its municipalities intend to continue to engage regional planning partners in discussions about a regional disposal plan. C&D disposal facilities appear to be adequate for the planning period, with the City of Greensboro's White Street Landfill and WCA, Inc. of High Point continuing operations. In addition, there are currently 15 active LCID landfills in operation throughout the County.
- **Education** – Current efforts are being focused on educating the residential, commercial, and industrial sectors about the benefits of recycling. The Cooperative Extension Service provides solid waste and recycling educational opportunities for residents, including grass-cycling and composting classes. Information about solid waste and recycling programs is made available to residents and businesses through collection service providers, in County and municipal offices and facilities and on government and corporate websites. Government-sponsored events highlighting Earth Day and America Recycles day have garnered media attention and assisted in community education efforts. The County intends



to continue to provide elementary school recycling programs, to make classroom recycling lessons available to elementary, middle and high school teachers, and to encourage and provide assistance with administrative and classroom recycling programs. In addition, the County and its municipal partners will work to expand public awareness of businesses and service providers that incorporate substantial “green” procedures and policies into their operations through the development of a recognition program.

- **Special Waste** – The City of Greensboro and Guilford County provide a disposal site for residential household hazardous waste and electronics, including computer equipment and televisions. In addition, the County is working to continue its annual spring clean-up event (HHW, scrap tires and whites goods are accepted from residents) and expand special collection events to other areas of the County. In March 2009, the County is partnering with Pleasant Garden to sponsor an e-waste collection event for all County residents. A new clean-up event, co-sponsored by the County and the City of High Point is being planned for June 2009. It is hoped that, if successful, these two new events will become annual programs. The County is also exploring the possibility of a clean-up event at Guilford College in the fall of 2009.
- **Illegal Disposal/Litter** – In an effort to reduce illegal disposal and littering, the County employs enforcement and educational personnel that deal directly with littering and illegal dumping. The County Sheriff’s Prison Farm manages a countywide clean-up program for illegal dump sites. The cities of Greensboro and High Point and the towns of Jamestown and Pleasant Garden sponsor and promote local events in the spring (Great American Clean-up) and fall (NC Big Sweep) that are designed to enlist the community in efforts to clean up neighborhoods and waterways. The County has purchased surveillance equipment, and is now beginning to monitor identified illegal dump sites. During this planning period, the County and its municipal partners intend to support, promote and expand NCDOT’s Adopt-a-Highway program and to promote the NCDOT Swat-a-Litterbug program.
- **Purchasing Recycled Products** – The County continues to expand its internal recycling program and to reaffirm its Recycling and Waste Reduction policy through all departments. Guilford County, Greensboro, and High Point have established policies on the purchase of recycled products, and the County continues to encourage other municipalities to adopt similar policies. The County Purchasing Department has worked with solid waste staff to develop a listing of recycled content products available for purchase, and to develop a list of qualified vendors of recycled products. In addition, the County will continue to analyze purchasing and bid opportunities based on environmentally preferable purchasing criteria.

- ❑ **Disaster Response** – The County has worked with its municipal partners to identify suitable sites for the temporary storage of disaster debris. Next, County staff will work with NC DENR waste specialists to evaluate these sites and obtain approval for their future use. In addition, the County developed an animal mortality emergency response plan in December of 2006, which is included in the 2009 Update.
- ❑ **Abatement of Abandoned Mobile Homes** – Based on new state legislation, the County will work with its municipal planning partners to evaluate the issue of abandoned mobile homes and develop a plan for abatement using the new state guidelines and statutory requirements.

### Plan Implementation

The Implementation Schedule presented below provides a chronological listing of the key solid waste management plan components recommended to be adopted by the local governments of the County.

<b>Guilford County, North Carolina</b> <b>IMPLEMENTATION SCHEDULE</b>	
<b>Fiscal Year</b>	<b>Action</b>
2009-2010	<ol style="list-style-type: none"> <li>1. Guilford County and its municipal planning partners will develop and implement a public education plan for landfill bans on rigid plastic bottles, used oil filters, pallets, computer equipment and televisions.</li> <li>2. Guilford County will work with local service providers and recycling centers in an effort to ensure that all rigid plastic bottles will be accepted for recycling and not considered as contamination.</li> <li>3. Guilford County and its municipal partners will implement the state landfill ban on rigid plastic bottles, used oil filters and wooden pallets, which is effective 10/1/09.</li> <li>4. Guilford County will begin the development of a policy to encourage deconstruction, especially for redevelopment projects.</li> <li>5. Guilford County will work to expand its Christmas tree recycling drop-off program to include additional sites throughout the County.</li> <li>6. Guilford County will seek grant funding to expand its existing education and outreach programs.</li> <li>7. Guilford County will continue to convene regular countywide solid waste meetings and regional solid waste management meetings to evaluate new information and ideas, and to monitor changes in regulations and new legislation.</li> <li>8. Guilford County will work with its municipal partners to initiate new collection events for residents throughout the County.</li> <li>9. Guilford County will work with NC DENR staff to evaluate and approve identified temporary storage sites for disaster debris.</li> <li>10. Guilford County and its municipal partners will evaluate the issue of abandoned mobile homes and develop a plan for abatement that is consistent with state requirements.</li> <li>11. Guilford County will expand its solid waste website to include information about illegal dumping, NCDOT's Swat-a-Litterbug program, local composting facilities and their products and the cooperative extension's educational opportunities, and encourage its municipal partners to include this information on their websites as well.</li> </ol>

Fiscal Year	Action
2010-2011	<ol style="list-style-type: none"> <li>1. Guilford County will work with its municipal partners to successfully implement the state landfill ban on computer equipment and televisions.</li> <li>2. Guilford County will work with its municipal partners to develop a policy to reduce the toxicity of chemicals used by government agencies and facilities.</li> <li>3. Guilford County will expand public awareness of local businesses and service providers that incorporate green procedures and policies into their operations through a recognition program.</li> <li>4. Guilford County and its municipal partners will support, promote and expand NCDOT's Adopt-a-Highway program.</li> <li>5. Guilford County will work with its municipal partners to encourage the adoption of an environmentally preferable purchasing policy.</li> </ol>
2011-2012	<ol style="list-style-type: none"> <li>1. Guilford County will develop and enact a policy requiring county-licensed garbage collectors to provide recycling collection with minimum standards, and yard waste collection as part of their license to operate in Guilford County.</li> <li>2. Update Solid Waste Management Plan.</li> <li>3. Re-evaluate incineration options to determine cost effectiveness.</li> </ol>

## 1.1 Background

In accordance with North Carolina General Statute 130A-309.09A(b), the local governments of Guilford County combined their efforts in 1997 to produce a comprehensive solid waste management plan for the entire County. The ten-year plan included waste reduction goals and identified existing and potential programs needed to meet these established goals. The plan was finalized and adopted by the participating Guilford County jurisdictions in accordance with the July 1, 1997 deadline established by state regulations.

The regulations require that local governments update their solid waste management plans at least every three years. The intent of the regulations is to keep the plan current and provide a means to re-evaluate existing solid waste management practices. An updated plan was adopted by the local governments of Guilford County and submitted to the Division of Waste Management in June 2000, in June 2003 and again in June 2006. The 2006 Plan update has been revised to reflect the County's most recent examination of solid waste management issues in this 2009 Guilford County Solid Waste Management Plan Update (2009 Update).

The 2009 Update discusses current solid waste practices within Guilford County, the impact that the current fiscal situation is likely to have on those practices and possible changes that can be made to improve solid waste management and to reduce solid waste generation over the next ten years. The local and municipal partnership that developed the 2006 Update has followed through on a commitment to evaluate solid waste management from a regional perspective. This has entailed developing lines of communication with neighboring counties, towns and cities that manage solid waste and has enabled us to gain a more complete understanding of the solid waste challenges and issues that face us all, now and in the future. So far, regional solid waste group meetings have proven to be an effective means of exchanging ideas and coordinating efforts to lobby state elected officials. There is interest on the part of regional group members to work together on public information campaigns and to discuss regional disposal options.

Plan updates will follow, at minimum, every three years and will include enhancements to existing solid waste management programs and practices, as well as the development of new programs and strategies that meet the changing needs of our local community and our region.



## 1.2 Geographical Area

The current planning area includes Guilford County and the following municipalities: Archdale, Gibsonville, Greensboro, High Point, Jamestown, Oak Ridge, Pleasant Garden, Sedalia, Stokesdale, Summerfield, and Whitsett. The City of Archdale has joined with the other municipalities in Guilford County to develop this 2009 Update, since all of the city's solid waste is now processed and disposed of in Guilford County rather than Randolph County, as was formerly the case. According to records maintained by the North Carolina Office of State Budget and Management, the total County population increased by 5 percent between July 2004 and July 2007. Population distribution within the County as estimated in July 2007 is shown in Table 1-1.

<b>Table 1-1</b> <b>Guilford County, North Carolina</b> <b>ESTIMATED POPULATION - JULY 2007</b>	
<b>Towns and County</b>	<b>Population</b>
City of Archdale	341
Town of Gibsonville	2,587
City of High Point	96,748
City of Greensboro	248,111
Town of Jamestown	3,369
Town of Oak Ridge	4,758
Town of Pleasant Garden	5,228
Town of Sedalia	668
Town of Stokesdale	3,756
Town of Summerfield	7,783
Town of Whitsett	750
Guilford County - Unincorporated Areas	86,681
<b>TOTAL</b>	<b>460,780</b>
<i>Source: North Carolina State Demographics</i>	

## 1.3 Planning Area Goals

By implementing the key actions listed in the 2009 Update and by continuing to pursue a regional approach to solid waste management, the County can help the state move closer to its waste reduction goal of 40%, and make a significant contribution to the new state goal of 2 million tons recycled annually by 2012. The County and its municipal partners have summarized their commitment to waste reduction in the following goals:

- Goal 1 – Develop a Solid Waste Management Plan that is in conformance with state requirements, that supports local objectives and that addresses new state solid waste legislative mandates.

- ❑ Goal 2 – Identify any deficiencies in existing solid waste management programs and systems that must be addressed in order to meet local needs and provide protection for the public health and for the environment.
- ❑ Goal 3 – Develop local reduction goals and programs for Guilford County.
- ❑ Goal 4 – Develop and implement a comprehensive, ongoing public education program and encourage public participation in the long-range planning process.
- ❑ Goal 5 – Maintain an ongoing planning process, including the ongoing regional dialog that was begun in 2006, so that the feasibility of future options can be thoroughly investigated, reviewed and adopted by the planning partners in a timely fashion.

## SECTION 2.0

### WASTE STREAM EVALUATION

#### 2.1 Introduction

The purpose of this Section is to present the quantities, characteristics, and projections of municipal solid waste streams that will require management in Guilford County during the ten-year planning period. In this plan, the term “municipal solid waste” or “MSW” is used to describe the wastes that are generated by the residential, commercial, and industrial sectors of Guilford County. The term “construction and demolition” debris or “C&D” waste is used to describe any waste resulting solely from construction, remodeling, repair, or demolition operations on pavement, buildings, or other structures.

#### 2.2 Total Waste Stream Managed

Table 2-1 presents historical quantities of waste managed in Guilford County. This summary includes the MSW and C&D tonnages landfilled plus the waste diverted through recycling and yard waste composting programs.

<p style="text-align: center;"><b>Table 2-1</b> <b>Guilford County, North Carolina</b> <b>TOTAL WASTE MANAGED</b></p>					
<b>Fiscal Year</b>	<b>Population<sup>1</sup></b>	<b>MSW<sup>2</sup> Tons Landfilled</b>	<b>C&amp;D Tons Landfilled</b>	<b>Total Tons Diverted</b>	<b>Total Tons Managed</b>
1997 - 1998	385,852	467,536	51,949	69,318	588,803
1998 - 1999	391,008	474,945	52,772	69,206	596,923
1999 - 2000	393,434	613,768	142,987	184,347	941,102
2000 - 2001	422,179	555,284	174,728	202,135	932,147
2001 - 2002	425,931	544,138	214,429	80,814	839,381
2002 - 2003	428,643	538,715	170,866	70,384	779,965
2003 - 2004	431,606	491,060	168,165	65,600	724,825
2004 - 2005	434,949	441,231	205,035	79,332	725,598
2005 - 2006	442,355	476,040	227,566	81,819	785,425
2006 - 2007	451,087	531,626	169,834	79,145	780,605
2007 - 2008	460,784	491,268	138,381	91,449	721,098
<sup>1</sup> Population Projections taken from North Carolina State Demographics, Projected Annual County Population Totals ( <a href="http://www.demog.state.nc.us">http://www.demog.state.nc.us</a> ) <sup>2</sup> Includes residential, commercial, and industrial.					
<b>NOTES:</b> <ul style="list-style-type: none"> <li>Historical data taken from North Carolina Solid Waste Management Annual Reports and DENR's County Waste Disposal Reports.</li> </ul>					

## 2.3 Current Waste Stream Characteristics

### 2.3.1 Waste Stream Analysis by Sector

For the purposes of this plan, the total waste stream in Guilford County has been divided into four sectors based on types of waste generators; namely, the residential, commercial, industrial and C&D sectors. The wastes generated by three of these sectors (residential, commercial, and industrial) constitute municipal solid waste. Table 2-2 presents the percentages of waste estimated to be generated by the four identified sectors.

Table 2-2 Guilford County, North Carolina WASTE ESTIMATES BY SECTOR						
Measurement	MSW			Total MSW	C&D Waste	Total Waste Stream
	Residential Waste	Commercial Waste	Industrial Waste			
Percentage	29%	26%	23%	78%	22%	100%
Source: NCDENR Local Government Assistance Office.						

### 2.3.2 Waste Stream Composition

At this time, no waste characterization studies have been performed, in conjunction with this plan, to determine the composition or makeup of the waste stream generated by each sector in the County. However, estimates of the waste components found in the three sectors comprising the MSW stream in Guilford County have been compiled using statistics presented in Volume I of the North Carolina Recycling and Solid Waste Management Plan.

#### 2.3.2.1 Residential Waste Composition

The state's plan estimates that paper, organics, and plastics are the most prevalent materials found in the residential waste stream. Using the percentage estimates compiled by the state, and the residential waste tonnage estimated to have been generated in Guilford County during FY 2007-08, the amounts of different materials found in this portion of the County's MSW stream have been calculated and are presented in Table 2-3.



<p style="text-align: center;"><b>Table 2-3</b>  <b>Guilford County, North Carolina</b>  <b>ESTIMATE OF RESIDENTIAL WASTE COMPOSITION – FY 2007-08</b></p>		
<b>Material</b>	<b>State Estimate (Percent)<sup>1</sup></b>	<b>Estimated Tons Generated</b>
Paper	31%	44,200
Organics / Yard Waste	24%	34,200
Other <sup>2</sup>	13%	18,500
Plastics	10%	14,200
Glass	8%	11,400
Metals	8%	11,400
Cardboard	6%	8,600
<b>TOTAL</b>	<b>100%</b>	<b>142,500</b>
<sup>1</sup> Percentages derived from North Carolina Recycling and Solid Waste Management Plan, 1992, Volume 1, pages 6-17. <sup>2</sup> Other includes textiles, wood, and rubble/C&D debris.		

### 2.3.2.2 Commercial Waste Composition

Using the percentage estimates compiled by the state, and the commercial waste tonnage estimated to have been generated in Guilford County during FY 2007-08, the amounts of different materials found in this portion of the County's MSW stream have been calculated and are presented in Table 2-4. As is shown in Table 2-4, the state estimates indicate that the most prevalent materials found in the commercial waste stream include paper, cardboard, and organics.

<p style="text-align: center;"><b>Table 2-4</b>  <b>Guilford County, North Carolina</b>  <b>ESTIMATE OF COMMERCIAL WASTE COMPOSITION – FY 2007-08</b></p>		
<b>Material</b>	<b>State Estimate (Percent)<sup>1</sup></b>	<b>Estimated Tons Generated</b>
Paper	26%	33,200
Cardboard	26%	33,200
Organics / Yard Waste	16%	20,400
Other <sup>2</sup>	15%	19,200
Plastics	8%	10,200
Metals	6%	7,700
Glass	3%	3,800
<b>TOTAL</b>	<b>100%</b>	<b>127,700</b>
<sup>1</sup> Percentages derived from North Carolina Recycling and Solid Waste Management Plan, 1992, Volume 1, pages 6-17. <sup>2</sup> Other includes textiles, wood, and rubble/C&D debris.		

### 2.3.2.3 Industrial Waste Composition

The state's plan showed that the waste materials, which were the main components of the industrial waste stream, include paper, cardboard, textiles,

plastics, and organics. Using the percentage estimates compiled by the state, and the industrial waste tonnage estimated to have been generated in Guilford County during FY 2007-08, the amounts of different materials found in this portion of the County's MSW stream have been calculated and are presented in Table 2-5.

<p style="text-align: center;"><b>Table 2-5</b>  <b>Guilford County, North Carolina</b>  <b>ESTIMATE OF INDUSTRIAL WASTE COMPOSITION – FY 2007-08</b></p>		
<b>Material</b>	<b>State Estimate (Percent)<sup>1</sup></b>	<b>Estimated Tons Generated</b>
Paper	26%	29,400
Cardboard	24%	27,100
Other <sup>2</sup>	20%	22,600
Plastics	14%	15,800
Organics / Yard Waste	10%	11,300
Metals	5%	5,700
Glass	1%	1,100
<b>TOTAL</b>	<b>100%</b>	<b>113,000</b>
<sup>1</sup> Percentages derived from North Carolina Recycling and Solid Waste Management Plan, 1992, Volume 1, pages 6-17. <sup>2</sup> Other includes textiles, wood, and rubble/C&D debris.		

## 2.4 Waste Stream Projections For Guilford County

### 2.4.1 Municipal Solid Waste

Municipal solid waste projections have been revised to reflect a decrease in the per capita generation rate since the last update. The waste quantities, which cover the planning period of July 1, 2009 through June 30, 2019, are presented in Table 2-6. It has been assumed that the per capita solid waste generation rate documented during FY 2007-08 (see Table 3-1) will remain constant throughout the ten-year period covered by this 2009 Update. Likewise, the “sector percentage estimates,” presented in Table 2-2, have been assumed to be constant and have been used to estimate the quantities of MSW anticipated to be generated by the individual sectors that comprise MSW (residential, commercial, and industrial waste).

<p style="text-align: center;"><b>Table 2-6</b>  <b>Guilford County, North Carolina</b>  <b>FUTURE MSW TONNAGE PROJECTIONS BY SECTOR<sup>1</sup></b></p>						
Year	Population	Residential Waste	Commercial Waste	Industrial Waste	Total MSW	Total Waste Stream
2009-2010	475,826	189,050	169,490	149,930	508,470	651,880
2010-2011	481,488	191,290	171,510	151,720	514,520	659,640
2011-2012	487,327	193,610	173,590	153,560	520,760	667,640
2012-2013	493,167	195,930	175,670	155,400	527,000	675,640
2013-2014	499,007	198,250	177,750	157,240	533,240	683,640
2014-2015	504,846	200,570	179,830	159,080	539,480	691,640
2015-2016	510,731	202,920	181,920	160,930	545,770	699,700
2016-2017	516,753	205,300	184,070	162,830	552,200	707,950
2017-2018	522,775	207,700	186,210	164,730	558,640	716,200
2018-2019	528,796	210,090	188,360	166,620	565,070	724,450
<sup>1</sup> A per capita generation rate of 1.37 tons/person/year waste used to project total waste stream tonnages throughout the period. Tonnages rounded to the nearest 10 tons.						

#### 2.4.2 Construction and Demolition (C&D) Waste

The C&D waste quantity projections for Guilford County during the planning period of July 1, 2009 through June 30, 2019 are presented in Table 2-7. These projections have been derived using the C&D tonnages presented in the state's County Waste Disposal Report for the period July 1, 2007 - June 30, 2008. It has been assumed that the "sector percentage estimates" for C&D waste, presented in Table 2-2, will remain constant throughout the planning period.

<p style="text-align: center;"><b>Table 2-7</b>  <b>Guilford County, North Carolina</b>  <b>FUTURE C&amp;D TONNAGE PROJECTIONS</b></p>				
Year	Population	Total MSW <sup>1</sup>	C&D Waste <sup>2</sup>	Total Waste Stream
2009-2010	475,826	508,470	143,410	651,880
2010-2011	481,488	514,520	145,120	659,640
2011-2012	487,327	520,760	146,880	667,640
2012-2013	493,167	527,000	148,640	675,640
2013-2014	499,007	533,240	150,400	683,640
2014-2015	504,846	539,480	152,160	691,640
2015-2016	510,731	545,770	153,930	699,700
2016-2017	516,753	552,200	155,750	707,950
2017-2018	522,775	558,640	157,560	716,200
2018-2019	528,796	565,070	159,380	724,450
<sup>1</sup> A per capita generation rate of 1.37 tons/person/year waste used to project total waste stream tonnages throughout the period. Tonnages rounded to the nearest ten tons.				

## SECTION 3.0

### WASTE REDUCTION GOALS

#### 3.1 Historical Waste Reduction Efforts

The state has designated FY 1991-92 as the baseline year for comparing reduction efforts. The per capita generation rate was established in the 1997 Solid Waste Management Plan to be 1.48 tons per year based on a total waste stream of 523,930 tons and a population of 353,536. However, there has been a discrepancy in the reporting of the per capita rate in the North Carolina Solid Waste Annual Report due to the exclusion of C&D waste from the calculation. Table 3-1 provides a summary of historical waste reduction efforts for both the County and state per capita rates. The County's baseline per capita rate of 1.35 tons per year, as established by the state, has been used in the development of future reduction goals for this update.

<b>Table 3-1</b> <b>Guilford County, North Carolina</b> <b>HISTORICAL WASTE REDUCTION</b>								
Fiscal Year	Population <sup>1</sup>	MSW <sup>2</sup>	C&D	Total Tonnage	Per Capita Rate Tons Per Year	Waste Reduction <sup>4</sup>		
						County 1.48 TPY	State 1.35 TPY	
1991 - 1992								
SWM Plan:	353,536	471,540	52,390	523,930	1.48 (8.12)	---	---	
State:				471,541	1.35 (7.40)	---	---	
1998 - 1999	391,008	474,945	52,772	527,717	1.35 (7.40)	8.8%	0.0%	
1999 - 2000	393,434	613,768	142,987	756,755	1.92 (10.54)	-30.0%	-42.5%	
2000 - 2001	421,048	555,284	174,728	730,012	1.73 (9.50)	-17.1%	-28.4%	
2001 - 2002	424,032	544,138	214,429	758,566	1.79 (9.80)	-20.9%	-32.5%	
2002 - 2003	428,794	538,715	170,866	709,581	1.65 (9.06)	-11.5%	-22.2%	
2003 - 2004	431,199	468,049	191,175	659,224	1.53 (8.38)	-3.4%	-14.3%	
2004 - 2005	434,693	441,231	205,035	646,266	1.49 (8.15)	-0.7%	-10.4%	
2005 - 2006	442,355	476,040	277,566	703,606	1.59 (8.71)	-7.4%	-17.8%	
2006 - 2007	451,087	531,626	169,834	701,460	1.56 (8.55)	-5.4%	-15.5%	
2007 - 2008	460,784	491,268	138,381	629,665	1.37 (7.51)	7.4%	- 1.0%	
<sup>1</sup> Population projections taken from North Carolina State Demographics, Projected Annual County Population Totals ( <a href="http://www.demog.state.nc.us">http://www.demog.state.nc.us</a> ) <sup>2</sup> Includes residential, commercial, and industrial. <sup>3</sup> Estimated 100,000 tons of Land Clearing and Inert Debris (LCID) taken from total MSW listed on City of Greensboro SWMAR. <sup>4</sup> The waste reduction rate differs due to a discrepancy in the North Carolina Solid Waste Annual Report due to the exclusion of C&D waste from the calculation.								
<b>NOTES:</b> <ul style="list-style-type: none"> <li>Historical Data from North Carolina Solid Waste Management Annual Reports and DENR's County Waste Disposal Reports.</li> <li>Total MSW during FY 1991-92 includes waste disposed of in landfills plus tonnage diverted from landfills via recycling, composting, and mulching efforts plus C&amp;D waste.</li> <li>( ) indicates per capita rate in pounds per person, per day.</li> </ul>								

### 3.2 Future Waste Reduction Goals

In its FY 2007-08 NC Solid Waste Annual Report, the state again reports that its goal of 40 percent waste reduction will not be achieved. Few local governments have been able to establish source reduction programs and expand recycling programs that are sufficient to meet this goal. In the fall of 2008, the state announced a new goal of recycling 2 million tons per year by 2012. Guilford County and its municipalities established a local waste reduction goal of 0% to be reached by FY 2012-13 and to be maintained through FY 2015-16. As indicated in Table 3-1, the per capita disposal rate declined dramatically in FY 2007-08, leaving the County only 1% away from the stated goal. Several factors contribute to Guilford County's reduction in solid waste tonnage. They are as follows:

- ❑ A reduction in waste disposal in Guilford County, based on the current economy.
- ❑ Greater public awareness of solid waste issues in Guilford County.
- ❑ Increased availability of recycling opportunities for residents and businesses.
- ❑ Expanded public education efforts.

Upon careful consideration of the above items in conjunction with future waste reduction estimates, waste reduction goals have been updated using the method outlined by the NC Solid Waste Section. The new goals are as follows:

◆	FY 2012-13	<u>0</u> %
◆	FY 2018-19	<u>0</u> %

### 3.3 Targeted Waste Tonnage Reductions

By examining population estimates and past waste disposal figures, the waste reduction goals can be converted from percents to tons diverted. As discussed previously, the baseline year (FY 1991-92) disposal rate is 1.35 tons per capita. This tonnage per capita figure was calculated using demographics information provided by the North Carolina Office of State Budget and Management and waste tonnage information provided by the County. At this per capita disposal rate, Guilford County would dispose of 665,775 tons in FY 2012-13 and 713,875 tons in FY 2018-19 (see Table 3-2).

Table 3-2 Guilford County, North Carolina THREE- and TEN-YEAR WASTE and POPULATION PROJECTIONS			
Year	Population	Waste Disposal	Per Capita Disposal Rate
Baseline Year, 1991-92	353,536	523,930	1.35
Year	Projected Population	Projected Waste	1.35
Fiscal Year 2012-13	493,167	665,775	
Fiscal Year 2018-19	528,796	713,875	
Source: Population figures from Office of State Budget and Management, baseline year waste tonnage from Guilford County Solid Waste Management Plan.			

To achieve the goal of 0 percent per capita waste reduction in FY 2012-13, Guilford County must reduce its per capita disposal rate from the current 1.37 tons to 1.35 tons (see Table 3-3). With the new per capita rate, the County's future landfill disposal should be limited to 665,775 tons for FY 2012-13 and 713,875 tons for FY 2018-19.

<p align="center"><b>Table 3-3</b>  <b>Guilford County, North Carolina</b>  <b>TARGETED WASTE REDUCTION – FY 2012-13 and FY 2018-19</b></p>		
<b>Calculations</b>	<b>FY 2012-13</b>	<b>FY 2018-19</b>
1. Baseline year per capita disposal rate (FY 1991-92 unless alternate approved by Section)	1.35	1.35
2. Percent waste reduction goal	0%	0%
3. Targeted per capita disposal rate (Subtract line 2 from 1.0 and multiply result by line 1)	1.35	1.35
4. Estimated population for FY 2012-13 and FY 2018-19. (Available at <a href="http://www.osbm.state.nc.us/osbm/index.html">http://www.osbm.state.nc.us/osbm/index.html</a> )	493,167	528,796
5. Projected tonnage for disposal at baseline disposal rate (Multiply line 1 by line 4)	665,775	713,875
6. Targeted annual tonnage for disposal (Multiply line 3 by line 4)	665,775	713,875
7. Targeted annual tonnage to reduce (Subtract line 6 from line 5)	0	0



## THE PLANNING PROCESS AND PUBLIC PARTICIPATION

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Guilford County, as the lead agency, has worked with its municipal solid waste planning partners in the development of this three-year update of the Countywide solid waste management plan. Workshop sessions were held with staff and elected officials present representing the County and each municipality. Participants collected and reviewed data, reviewed the progress made in implementing the 2006 Plan Update, and made careful and deliberate determinations as to whether or not this 2009 Update should contain revisions to the goals and objectives previously established. A public meeting was then held on March 16, 2009 to receive input on the solid waste management plan goals and objectives drafted by participants in the three-year update. The public was notified of this meeting through a legal notice provided to the local print media, through televised promotion of the meeting and through meeting notices posted by the local governments in government facilities, on government websites and in local newsletters. Appendix B provides a copy of the public notice. In addition, the County established a web page designed to inform the public about the solid waste management plan and the current planning process. The website includes a printable copy of the 2006 Update, new data on disposal and recycling rates and information about the March 16<sup>th</sup> public meeting. An opportunity for public comment was an integral part of the web page. Interested parties were encouraged to complete a short questionnaire and also to provide comments and feedback relating to solid waste services and issues. Inviting public comment online proved to be a valuable tool that enabled participants to reach a larger number of residents and, as a result to gain more insight into public perceptions and concerns.

A listing of those participating in the plan's development is provided as follows:

- Guilford County –
  - Staff: Susan Heim, Environmental Services Coordinator; Lee Hill, Environmental Inspections Program Specialist; Betty Garrett, Assistant Director for Community Services, Planning & Development; Ken Carter, Assistant Health Director; Tobin Shepherd, Environmental Health Director; Brenda Morris, Cooperative Extension Director; Michael Halford, Budget, Management & Evaluation Director.
  - Elected Officials: Kirk Perkins, Commissioner.
- City of Archdale –
  - Staff: Jerry Yarborough, City Manager; Jeff Wells, Planning Director; D. J. Señeres, Stormwater Manager.

- ❑ Town of Gibsonville –
  - Staff: R. Benjamin Baxley, Town Manager; Coy May, Public Works Director.
- ❑ City of Greensboro –
  - Staff: Bob Morgan, Deputy City Manager; Jeryl Covington, Environmental Services Director; Scott Bost, Landfill Supervisor; Dale Wyrick, Field Operations Director; Sheldon Smith, Field Operations.
- ❑ City of High Point –
  - Staff: Pat Pate, Assistant City Manager; W. Chris Thompson, Public Services Director; Richard McMillan, Asst. Public Services Director; Steven Pendry, Landfill Superintendent; Melanie Bruton, Interim MRF Superintendent.
  - Elected Officials: Hon. Rebecca Smothers, Mayor.
- ❑ Town of Jamestown –
  - Staff: Kathryn Billings, Town Manager; Chuck Smith, Public Works Director; Matthew Johnson, Town Planner.
- ❑ Town of Oak Ridge –
  - Elected Officials: David Rowe, Councilman.
- ❑ Town of Pleasant Garden –
  - Elected Officials: Anne Hice, Mayor; Nancy Jo Smith, Mayor Pro Tem.
- ❑ Town of Sedalia –
  - Elected Officials: Howard Morgan, Mayor.
- ❑ Town of Stokesdale –
  - Staff: Carolyn Joyner, Town Clerk.
- ❑ Town of Summerfield –
  - Staff: Michael Brandt, Town Administrator.
  - Elected Officials: Mark Brown, Mayor.
- ❑ Town of Whitsett –
  - Staff: C. Gary Deal, Town Manager.
- ❑ NC Department of the Environmental & Natural Resources –
  - Staff: Hugh Jernigan, Waste Management Specialist.

ASSESSMENT OF PROGRAMS AND SERVICES

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**5.1 Introduction**

Each solid waste management method is described below as required by North Carolina General Statute 130A-309.09A(b). Each section includes a description of the current program and identifies potential changes.

**5.2 Reduction**

With regard to municipal waste reduction activities within Guilford County, each of the municipalities providing solid waste services devotes some attention to encouraging support of waste reduction/reuse and recycling activities in the informational literature that they produce.

State offices and state supported colleges and county schools are required by legislation and executive order to practice waste reduction whenever possible and to have recycling programs in place for aluminum, office paper, and corrugated cardboard. County solid waste management planning partners have been working with representatives from the County schools to promote and expand these reduction and recycling programs, and will continue to provide encouragement and support whenever possible. Internally, Guilford County reaffirmed its waste reduction and recycling policy through all department directors in November 2005, and continues to expand its internal recycling program to increase its waste diversion rate. In addition, language requesting reduced packaging and recyclable packaging is now being integrated into purchasing specifications, bid packages and requests for proposals. Through a County web campaign entitled, “Green Tip of the Week,” residents are provided with pointers on a variety of environmental issues, including waste reduction.

**5.3 Collection**

Guilford County licenses private residential collection companies to provide services in the unincorporated areas and smaller towns. The County Commissioners set the maximum allowable fees and hold the haulers accountable through the license process. As of July 1, 2008, the maximum fee for residential garbage and recycling collection services in the unincorporated areas is \$16.50 per household per month.

Republic Services maintains the largest customer base with approximately 24,600 households in the unincorporated areas of Guilford County, 2,800 customers in the Town

of Summerfield, 1,301 customers in the Town of Stokesdale and 279 customers in the Town of Whitsett. Waste Industries serves a customer base of approximately 550 customers in the unincorporated areas of Guilford County, 1,841 households in the Town of Oak Ridge and 390 households in the Town of Sedalia.

Jenkins Waste Management, Inc. serves approximately 750 households in mobile home parks throughout the northeastern part of the County. Handy's Garbage Service has expanded its customer base to approximately 120 households in southern Guilford County. Joe's Sanitation Service is the newest licensed garbage collector, and now has approximately 100 customers in Guilford County. Waste Management is also licensed for residential collection, but serves no residential customers in Guilford County at this time. However, company representatives have indicated a desire to pursue residential collection routes in the near future.

The cities of Archdale, Greensboro and High Point provide residential collection services within their municipal boundaries, as do the towns of Gibsonville and Jamestown. The towns of Sedalia and Whitsett contract for residential collection services for all households within town limits; these services are paid by the towns. The towns of Oak Ridge, Stokesdale and Summerfield franchise a private garbage collection company to contract directly with individual residents for collection services, if desired.

Currently, white goods collection service is offered by Greensboro, High Point, Jamestown, Gibsonville, and privately by most licensed haulers operating in the unincorporated areas of the County and in the incorporated towns. The Guilford County Scrap Tire and White Goods Collection Facility opened in April 2005 and accepts white goods from residents, commercial businesses and municipalities.

In FY 06-07, County and municipal staff evaluated the feasibility of a universal collection program and the role such a program could play in residential recycling, including yard waste collection. It was determined that individual towns and cities were able to provide adequate collection services or service options for their residents. In addition, County-licensed residential garbage collectors expressed concerns about a universal collection program affecting their ability to remain in business. After a consensus was reached not to pursue universal collection at this time, municipal planning partners agreed to pursue yard waste collection as a part of their franchise and service agreements. So far, the towns of Oak Ridge and Summerfield have been able to add residential yard waste collection to their franchise agreements.

## 5.4 Recycling and Reuse

Recycling rates for the entire County remain unpredictable. After a significant drop, recycling tonnage seems to have stabilized somewhat. The City of Greensboro reduced its curbside recycling collection from weekly to bi-weekly in 2008 in order to reduce expenses. Possibly due to the use of 96-gallon totes for residential recycling, the City has not experienced a drop in the tonnage of recyclables collected to date. Economic conditions, combined with tremendously high scrap metal prices in 2008, have affected the recovery rates on both scrap tires and white goods. Comingled curbside programs experienced a similar decrease in the number of metal cans collected. Table 5-1 provides an historical summary of the tons diverted by material type, while Table 5-2 indicates the percent diversion rates.

Table 5-1 Guilford County, North Carolina TONS DIVERTED BY MATERIAL TYPE						
Year	Tires	White Goods	Household Hazardous Waste	Glass/ Metal/ Paper/ Plastic	Yard Waste	Total Tons Per Year
1997-98	6,300	1,662	188	25,335	35,833	69,318
1998-99	7,031	1,310	185	32,810	27,870	69,206
1999-00	7,658	1,156	181	30,415	144,937	184,347
2000-01	7,723	1,604	212	40,563	152,033	202,135
2001-02	8,126	2,654	228	45,956	23,850	80,814
2002-03	8,746	1,476	246	39,100	30,998	80,566
2003-04	9,200	1,522	209	39,656	15,013	65,600
2004-05	8,395	1,440	212	44,466	24,819	79,332
2005-06	7,361	1,731	263	44,208	28,256	81,819
2006-07	7,598	1,387	403	41,388	28,369	79,145
2007-08	7,065	543	478	43,034	40,329	91,449

The County has focused its efforts to increase recycling participation on public education and community outreach. In 2008, the County obtained private funding to produce a solid waste services guide that includes information about solid waste and recycling for the unincorporated areas and for all of the towns and cities within its jurisdiction. An expanded solid waste web page provides a downloadable version of the guide, as well as information about special cleanup events that feature recycling opportunities.

An online solid waste questionnaire was designed to encourage public input for use in the development of this 2009 Update. The overwhelming majority of responses received indicated that the public was unaware of upcoming landfill bans on rigid plastic bottles, used oil filters, wooden pallets, computer equipment and televisions. As a result, the County and its municipal partners have committed to the development of a public

awareness campaign, which will be coordinated with DPPEA's public education efforts. In addition, the County is working with local recycling centers in an effort to ensure that all rigid plastic bottles will be accepted for recycling, in conformance with the upcoming landfill ban in October 2009.

In 2007, the County facilitated meetings between local service providers and local ABC boards to discuss the details of the ABC licensees container recycling mandate, which became effective January 1, 2008. County staff acted as a clearinghouse for ABC recycling information for local bars and restaurants as well as the recycling service providers, using the media and the County website to further this outreach program. The cities of Greensboro and High Point implemented ABC recycling services for affected businesses in their central business districts and many local commercial waste haulers added ABC recycling collection to their list of available services.

In 2008, the County began internal recycling programs in three of its offices that had not previously had recycling services available. The programs have proven to be very successful and very popular with employees. Through the reduction in waste that has resulted, the County has able to begin decreasing solid waste collection services at these facilities. Additional County offices and facilities will be targeted for recycling in the future, with the desired result being recycling programs in all County facilities.

Recyclable materials and instructions for preparing those materials are listed in brochures provided to customers of both the private companies and the municipal programs. The City of Greensboro maintains 17 recycling drop-off locations for residents, some of which are also available for use by bars and restaurants to facilitate ABC recycling. In FY 06-07, the County partnered with Republic Waste Services on the development of a recycling convenience site at the scrap tire and white goods facility, which adjoins the Republic MSW transfer station. Due to the ability to accept only limited materials for recycling as well as site accessibility being restricted to hours of facility operation, the pilot program has not had great success to date. The County intends to re-evaluate the program in an effort to provide a higher level of service and to make the drop-off program more attractive for residents.

County staff have had success working with the school system to promote the availability of a recycling program for all schools, and with individual schools to initiate administration and classroom recycling. County staff intend to continue to work with schools to expand their internal recycling efforts. Following the 2006 Update, the County purchased a small number of event recycling containers, and staff began approaching coordinators of community events about recycling. Initial efforts proved successful, and County staff will continue to promote recycling at public events in this manner.



All of the towns, cities and unincorporated areas of the County have curbside recycling collection available to their residents, with the exception of the Town of Whitsett. In FY 08-09, Whitsett requested that its MSW collection bidders include pricing for recycling. However, it was determined by the town council that the additional cost for recycling services was too high for the town to absorb. The town is interested in working with the County to determine whether or not a drop-off site might be a more cost effective means of introducing a recycling program for residents.

A private company, WCA of High Point (formerly MR&R of Guilford) continues to operate a C&D/mixed waste processing facility in High Point. The facility currently processes approximately 80,000 tons of C&D material from Guilford County per year, with a diversion rate of about 35 percent. While the diversion rate has increased over the past several years, it still remains well below the original projections of 50 to 60 percent.

<p style="text-align: center;"><b>Table 5-2</b>  <b>Guilford County, North Carolina</b>  <b>PERCENT DIVERSION RATES</b></p>				
<b>Year</b>	<b>Total Solid Waste (MSW and C&amp;D) Tons Per Year</b>	<b>Tons Per Year Diverted</b>	<b>Total Tons Per Year</b>	<b>% Diversion</b>
1997-98	519,485	69,318	588,803	11.77%
1998-99	527,717	69,206	596,923	11.59%
1999-00	756,755	184,347	941,102	19.59%
2000-01	730,012	202,135	932,147	21.68%
2001-02	758,566	80,814	839,380	9.63%
2002-03	709,581	70,384	779,965	9.02%
2003-04	659,224	65,600	724,825	9.05%
2004-05	646,266	79,332	725,598	10.93%
2005-06	703,606	81,819	785,425	10.41%
2006-07	701,460	79,145	780,605	10.14%
2007-08	629,649	91,449	721,098	12.68%

## 5.5 Composting and Mulching

The Cooperative Extension Service at the Guilford County Agricultural Center promotes residential backyard composting through composting classes and demonstration sites.

Three municipalities currently recycle yard waste: the City of High Point recycles approximately 13,000 tons per year; the Town of Jamestown recycles approximately 800 tons per year; the City of Greensboro recycles approximately 26,000 tons per year. Most licensed garbage collectors provide yard waste collection for their residential customers,

and recycle the yard waste they collect through the City of High Point's Ingleside Compost Facility or the City of Greensboro's White Street Landfill compost site.

## **5.6 Incineration**

Incineration with or without energy recovery is not feasible at this time due to high costs and air quality problems. Based on a cursory review of the current incineration technology available, it has been determined that this disposal method remains uneconomical. However, incineration will be re-evaluated periodically.

## **5.7 Transfer Outside Geographical Area**

The MSW transfer station, owned by the City of Greensboro, began operations in September of 2006. The transfer station transports all MSW (approximately 240,000 tons per year) to the Uwharrie Environmental Landfill, located in Montgomery County, North Carolina.

Republic Services of North Carolina currently trucks an average of 12,100 tons of MSW per month from its Bishop Road transfer station out of the County. In FY 2007-08, an approximate total of 145,000 tons of Guilford County MSW was transported from the facility to the company's Uwharrie Environmental Landfill in Montgomery County for disposal.

## **5.8 Disposal**

The City of High Point's Kersey Valley Landfill is now the only MSW landfill operating in Guilford County, having at least enough capacity remaining at its current disposal rate to continue operations through the end of the planning period. The City of Greensboro eliminated MSW disposal at its White Street Landfill in conjunction with the opening of its new MSW transfer station, and now transports all of its MSW tonnage (approximately 240,000 tons per year) to the Uwharrie Environmental Landfill. Republic Services' Bishop Road Transfer Station, an alternative MSW disposal site located just south of Greensboro, currently receives over 12,000 tons of waste per month, or approximately 145,000 tons per year. This facility also transports waste to the Uwharrie Environmental Landfill in Montgomery County, which it owns and operates. At its current permitted disposal rate of 3,000 tons per day, an estimate of the remaining capacity at Uwharrie can be extrapolated as approximately 15.5 years.

Because permitted MSW landfill space is extremely limited in the County, and because the waste being transferred out of county goes to a privately owned MSW facility that has a limited capacity remaining, future disposal is a serious concern for Guilford County and its municipalities. In FY 2006-07, County staff initiated a regional solid waste planning

group that now includes representatives from the counties of Davidson, Forsyth, Randolph, Rockingham and Stokes, the cities of Asheboro, Burlington and Reidsville and the town of Kernersville. The meetings of this group have resulted in minimal interest in a regional disposal plan so far, but a regional dialogue will allow discussion to continue.

The White Street Landfill and the WCA of High Point C&D Processing and Treatment Facility are the disposal sites currently available for C&D material in Guilford County. These facilities have adequate suitable area for C&D capacity to continue operations through the duration of the planning period. A-1 Sandrock, Inc. has constructed a C&D landfill on the south side of Bishop Road. It is anticipated that a permit to operate will be issued for this new facility by the end of FY 08-09 or the beginning of FY 09-10.

There are currently 15 active Land Clearing and Inert Debris (LCID) landfills in Guilford County. The permitting process is not difficult for this type of landfill, and new facilities have been constructed as necessary to meet the demands of development that might occur in the area.

## 5.9 Education

The Cooperative Extension Service (housed at the Guilford County Agricultural Center) provides solid waste and recycling educational opportunities for residents on topics ranging from water conservation to backyard composting. The Cities of High Point and Greensboro offer printed materials about solid waste and recycling services available to their residents, and both cities have environmental educators on staff to promote community understanding and use of those programs. Many of the County licensed private garbage collectors also provide printed instructional materials for their customers.

The City of Greensboro, the City of High Point, and FCR, Inc. host educational classes for area students at their recycling facilities (MRFs). The Cooperative Extension Service visits area schools and demonstrates landfill processes, and conducts a program that demonstrates vermi-composting.

In FY 06-07, County staff worked with school system curriculum and instruction directors to have recycling designated as part of both the 2<sup>nd</sup> grade and 5<sup>th</sup> grade standard course of study. This has enabled environmental educators throughout the County to gain access to individual schools and to work with teachers and administrators to bring recycling education to elementary school classrooms. The County has continued to provide a recycling assembly program to an average of 8 elementary schools per fiscal year. The program has been very well received by students, teachers and parents, and has led to an increased interest in recycling education initiatives.

In FY 2007-08, the County obtained private funding to produce a solid waste services guide that includes information about solid waste and recycling for unincorporated areas and for all of the towns and cities within its jurisdiction. The guide is available at County and municipal offices and facilities. A downloadable version is also available on County and municipal websites. In addition, an expanded County solid waste website now provides residents and businesses with information about rules and regulations, new legislation, collection services, disposal options, solid waste enforcement, recycling and other solid waste programs and initiatives.

## **5.10 Special Waste**

Special wastes include tires, white goods, yard waste, household hazardous wastes (such as paint, pesticides, fluorescent tubes and bulbs, used motor oil and oil filters, and household chemicals) and e-waste. The County accepts scrap tires and white goods at its collection facility, located at 2138 Bishop Road, and also accepts white goods at the Northeast Fire Station convenience site.

The City of Greensboro and Guilford County will continue to provide a Household Hazardous Waste disposal program through Ecoflo, Inc. at the company's Greensboro facility. The program includes disposal of used oil filters, computer equipment and televisions, thereby helping to prepare the community for upcoming landfill bans on those materials. Many of the auto parts stores in the County provide used oil, oil filter and battery collection. In addition, a number of area retailers now accept rechargeable batteries and fluorescent tubes and bulbs for recycling. Guilford County and the City of Greensboro will continue to sponsor a Spring Cleanup Day where County residents can dispose of scrap tires, white goods, household hazardous wastes and pesticide containers. A similar event, co-sponsored by the County and the City of High Point, is in the planning stages for June of 2009. The County is further expanding its special cleanup program in 2009 with an e-waste collection day in March at the Pleasant Garden town hall. If these events prove to be successful, the County will continue to work with its municipal partners to expand its program of residential cleanup days to better serve the entire community.

## **5.11 Illegal Disposal / Litter**

Guilford County employs solid waste enforcement and educational personnel that deal directly with littering and illegal dumping. County solid waste staff work with inmate labor crews from the Guilford County Sheriff's Prison Farm to manage a countywide cleanup program for illegal dumpsites that contain at least 50 percent or more white goods. Over 1,000 tons of waste have been removed from Guilford County roads, ditches, and gullies as a result of this program. The North Carolina Department of

Transportation (NCDOT) also cleans up illegal dumpsites along state-maintained roads. Guilford County enforces zoning regulations that include illegal dumping, junk cars, and other illegal disposal issues. The County Planning and Development Department has also purchased a surveillance system that is currently being tested in areas where illegal dumping has become a problem. This system is expected to be used extensively throughout the County to monitor identified illegal dump sites in an effort to identify and prosecute the perpetrators.

The cities of Greensboro and High Point, as affiliates of Keep America Beautiful, participate in KAB sponsored cleanup programs, including The Great American Cleanup. Both cities, as well as some of the incorporated towns, participate in state sponsored cleanup programs such as Adopt-a-Highway and Big Sweep. Both cities also do litter indexing throughout their jurisdictions, and the City of High Point uses state inmate labor to help keep targeted areas picked up. The County provides staffing and support to these efforts whenever possible.

## **5.12 Purchasing Recycled Products**

Guilford County adopted its Recycling and Waste Reduction policy in April 2001. The cities of Greensboro and High Point also have waste reduction policies in effect. County solid waste staff has worked with the Purchasing Department to develop a list of recycled and recycled content products available for purchase by County offices and facilities. A list of qualified vendors of these products is also being developed. In addition, solid waste and purchasing staff have worked together in an effort to analyze purchasing and bid opportunities based on environmentally preferable purchasing standards. The solid waste management planning partners intend to promote the expansion of these existing policies, and to encourage other local governments to adopt similar recycling practices and policies.

## **5.13 Disaster Response**

The County and its municipal planning partners have developed a list of sites deemed suitable for use for the temporary storage of disaster debris. County staff will work with NCDENR staff to have these sites approved. Information on approved sites will be shared with Guilford County Emergency Services in an effort to ensure ample disaster debris storage capacity. A map of these sites is included in Appendix I.

Identified sites include the White Street and Kersey Valley landfills, the Ingleside composting facility, the Guilford County Sheriff's Prison Farm, Bryan Park Guilford County and parcels of land purchased by the County as open space in the area of Oak

Ridge. In addition, the County will work with its municipal solid waste planning partners to identify potential debris storage sites in the towns.

The County and its municipal planning partners developed and adopted an animal mortality emergency response plan and incorporated it into the solid waste management plan in December of 2006 as Appendix J.

## SOLID WASTE COSTS AND FINANCING METHODS

## 6.1 Introduction

The purpose of this Section is to provide information on the costs associated with the collection, processing, and disposal of waste managed by Guilford County's local governments. As prescribed by North Carolina General Statutes 130A-309.09A (b)(7), a description and assessment of the full cost of solid waste management, including the costs of collection, disposal, waste reduction, and other programs and methods of financing are presented.

## 6.2 Description of Program Costs

Below is a description of cost associated with the County's and municipalities' solid waste programs. Many of the small towns contract with private collectors who provide service in their communities and bill their residents directly for the service. In these cases, the total program cost reflects the total amount paid by residents for solid waste services.

<b>Table 6-1</b> <b>Guilford County, North Carolina</b> <b>RESIDENTIAL SOLID WASTE MANAGEMENT COSTS – FY 2007-08</b>					
	Collection	Disposal	Reduction Reuse & Recycling	Mulching, Composting, & Other Programs*	Total Program Cost
Guilford County	N/A	N/A	N/A	\$700,377	\$700,377
City of Archdale	\$337,675	\$173,840	\$169,353	\$95,000	\$775,868
City of Greensboro	\$11,105,337	\$2,666,777	\$3,374,215	\$1,913,832	\$19,060,161
City of High Point	\$5,300,000	\$1,690,000	\$1,239,000	\$550,000	\$8,779,000
Town of Gibsonville	\$122,878	\$68,018	\$57,118	N/A	\$248,014
Town of Jamestown	\$98,424	\$72,099	\$22,816	\$100,244	\$293,583
Town of Oak Ridge	---	---	---	---	\$300,936
Town of Pleasant Garden	<i>Residents contract individually with private collectors.</i>				
Town of Sedalia	---	---	---	---	\$43,921
Town of Stokesdale	---	---	---	---	\$244,728
Town of Summerfield	---	---	---	---	\$523,152
Town of Whitsett	---	---	---	---	\$32,538
*Other programs include scrap tire, household hazardous waste, and white goods processing.					



## 6.3 Financing Methods

The solid waste services/programs managed by the local governments which comprise Guilford County are funded through a variety of mechanisms, including tip fees, property taxes/general funds, household charges, sale of recyclables and equipment, grants, and Tire and White Good tax revenues. Table 6-2 presents a summary of the financing methods used to fund solid waste services/programs managed by the local governments that comprise Guilford County. In the cases where financing methods are not indicated, the municipality allows the service provider to collect fees directly from its customers. As can be seen, the financing methods used most often by local governments within the County include fees (tipping fees, customer service charges) and property taxes/general funds.

<p><b>Table 6-2</b>  <b>Guilford County, North Carolina</b>  <b>SOLID WASTE FINANCING METHODS USED BY LOCAL GOVERNMENTS</b>  <b>WHICH COMPRISE GUILFORD COUNTY</b></p>						
	Fees	Property Taxes/ General Fund	Sale of Recyclables/ Commodities/ Equipment	Grants	Tire and White Goods Tax	Other
Guilford County	---	X	X	X	X	---
City of Archdale	X	---	X	X	---	---
City of Greensboro	X	X	X	X	---	---
City of High Point	X	X	X	---	---	---
Town of Gibsonville	X	X	---	---	---	---
Town of Jamestown	X	X	---	---	---	---
Town of Oak Ridge	---	---	---	---	---	---
Town of Pleasant Garden	<i>Residents contract individually with private collectors.</i>					
Town of Sedalia	---	X	---	---	---	---
Town of Stokesdale	---	---	---	---	---	---
Town of Summerfield	---	---	---	---	---	---
Town of Whitsett	---	X	---	---	---	---

## 7.1 Introduction

This Section presents the plan of action for solid waste system components, which will supplement existing solid waste programs and best serve the future solid waste management needs of the citizens of Guilford County. The integration of these system components will enhance the capabilities of the local governments of the County to develop environmentally sound and economical solid waste management systems which meet local waste reduction, recycling, and composting goals, and which utilize, for those wastes which cannot be recovered, public or private landfills that meet all regulatory requirements. These planning actions have been summarized on the planning elements sheets as required by the state and included as Appendix F.

## 7.2 Recommended Actions

### 7.2.1 Reduction

- Each municipality should continue producing and distributing informational literature encouraging waste reduction, including the Guilford County Solid Waste Services Guide.
- Develop a County policy encouraging deconstruction, especially on redevelopment projects.
- Work with municipal planning partners to develop a policy to reduce the toxicity of chemicals used by government agencies and facilities.

### 7.2.2 Collection

- Develop and institute a policy requiring County licensed garbage collectors to provide recycling collection, with minimum standards, and yard waste collection as part of their license to operate in Guilford County.
- The City of Greensboro will evaluate bulk item collection to determine if a scheduled collection procedure would be more efficient and cost effective than a regular collection route.

### 7.2.3 Recycling and Reuse

- Develop a public education program for landfill bans on rigid plastic bottles, wooden pallets, used oil filters, computer equipment and televisions.
- Work with local recycling centers and processors in an effort to ensure that all rigid plastic bottles will be accepted for recycling and not considered contamination.
- Continue and expand work with schools to promote and institute administrative and classroom recycling.
- Continue to work with private companies and local recycling centers to develop convenience sites for residential recycling throughout the County.
- Implement the state landfill ban on rigid plastic bottles, wooden pallets and used oil filters that becomes effective October 1, 2009.
- Implement the state landfill ban on computer equipment and televisions that becomes effective January 1, 2011.

### 7.2.4 Composting and Mulching

- Promote current educational programs on backyard composting and vermi-composting through County and municipal websites.
- List on County and municipal websites locations of government facilities where compost and mulch are available to the public.
- Expand the County's Christmas tree recycling program to include additional drop-off sites.
- Municipal planning partners will continue to add yard waste collection to their franchise agreements for solid waste and recycling.

### 7.2.5 Incineration Element

- Re-evaluate incineration as a means of disposal during FY 2011-12 or sooner if a change in technology occurs.

### 7.2.6 Transfer Outside Geographical Area

- City of Greensboro MSW transfer station and Republic Waste MSW transfer station will continue operations. No need for additional transfer stations has been identified in Guilford County at this time.

### 7.2.7 Disposal

- The City of High Point's Kersey Valley Landfill will continue MSW disposal at its current rate throughout the ten-year planning period.
- WCA of High Point C&D Treatment and Processing Facility will continue to operate.
- The City of Greensboro will continue its C&D landfill operation and will open additional C&D landfill capacity in the near future.
- The County and its municipal planning partners will continue to pursue and evaluate long-term disposal options.
- The County will continue to pursue a dialogue about regional disposal plans and policies through the regional solid waste management meetings it facilitates.

### 7.2.8 Education

- Develop a comprehensive public awareness program for the upcoming landfill bans on rigid plastic bottles, used oil filters, wooden pallets, computer equipment and televisions.
- Continue to provide a County-sponsored recycling presentation for elementary schools throughout the County.
- Continue to provide educational programs on backyard composting, vermi-composting and other environmental issues through the Guilford County Cooperative Extension.
- Seek grant funding to expand existing education programs.
- Increase public awareness of businesses and service providers that incorporate "green" procedures and policies into their operations through the use of a recognition program using the County's "Measure Up" campaign, media and website outlets.

- Work with civic organizations to provide recycling education to their membership and integrate recycling education into their public events when possible and appropriate.

#### **7.2.9 Special Waste**

- Continue operations of the Guilford County Scrap Tire and White Goods Collection Facility.
- Continue the City of Greensboro/Guilford County Household Hazardous Waste Program, including the e-waste component that accepts computer equipment and televisions.
- Continue the Guilford County/Pleasant Garden E-Cycling 2009 as an annual event for residential electronics recycling.
- Promote NCDA-sponsored pesticide disposal programs through events in the incorporated towns and cities within Guilford County.
- Continue the existing Spring Cleanup for residential disposal of scrap tires, white goods, household hazardous waste and e-waste, and expand the program to include an annual spring date in High Point and an annual fall date at Guilford College.

#### **7.2.10 Illegal Disposal/Litter**

- Work with small towns to use surveillance program at identified illegal dumping sites.
- Expand county solid waste website to include a page devoted to illegal dumping, solid waste enforcement and anti-litter education.
- Support, promote and expand NCDOT's Adopt-a-Highway program in Guilford County.
- Promote the NCDOT Swat-a-Litterbug program through community outreach efforts and on local and municipal government websites.
- Continue to work with Greensboro Beautiful and Keep High Point Beautiful to promote anti-litter education and outreach.

#### **7.2.11 Purchasing Recycled Products**

- Continue to work with DPPEA to develop a training program about recycled products and related economic and environmental issues.
- Continue to expand the opportunity for County EPP purchasing.
- Work with municipal planning partners to encourage the adoption of EPP policies.

#### **7.2.12 Disaster Response**

- The County will work with its municipal partners and NCDENR staff to have the identified disaster debris storage sites evaluated and approved for future use.
- County solid waste staff will continue to work with and update County Emergency Management and Public Health staff concerning disaster response planning as it relates to solid waste.
- The County and its municipal planning partners will update the solid waste management plan at least every 3 years and more frequently if necessary.

#### **7.2.13 Abatement of Abandoned Mobile Homes**

- The County will work with its municipal partners to evaluate the issue of abandoned mobile homes in Guilford County.
- The County will develop a plan for the abatement of abandoned mobile homes in Guilford County, based on the results of this evaluation and in conformance with state statutory requirements.

### **7.3 Implementation Schedule**

The Implementation Schedule presented in Table 7-1 provides a chronological listing of the key solid waste system components recommended to be adopted by the local governments of the County.

**Table 7-1**  
**Guilford County, North Carolina**  
**IMPLEMENTATION SCHEDULE**

<b>Fiscal Year</b>	<b>Action</b>
2009-20010	<ol style="list-style-type: none"> <li>1. Guilford County and its municipal planning partners will develop and implement a public education plan to address upcoming landfill bans on rigid plastic bottles, used oil filters, pallets, computer equipment and televisions.</li> <li>2. Guilford County will work with local service providers and recycling centers in an effort to ensure that all rigid plastic bottles will be accepted for recycling and not considered as contamination.</li> <li>3. Guilford County and its municipal partners will implement the state landfill ban on rigid plastic bottles, used oil filters and wooden pallets, which becomes effective 10/1/09.</li> <li>4. Guilford County will begin the development of a policy to encourage deconstruction, especially for redevelopment projects.</li> <li>5. Guilford County will work to expand its Christmas tree recycling drop-off program to include additional sites throughout the County.</li> <li>6. Guilford County will seek grant funding to expand its existing education and outreach programs.</li> <li>7. Guilford County will continue to convene regular countywide solid waste meetings and regional solid waste management meetings to evaluate new information and ideas and to monitor changes in regulations and new legislation.</li> <li>8. Guilford County will work with its municipal partners to initiate new collection events for residents throughout the County.</li> <li>9. Guilford County will work with NC DENR staff to evaluate and approve identified temporary storage sites for disaster debris.</li> <li>10. Guilford County and its municipal partners will evaluate the issue of abandoned mobile homes and develop a plan for abatement that is consistent with its goals and with state requirements.</li> <li>11. Guilford County will expand its solid waste website to include information about illegal dumping, NCDOT's Swat-a-Litterbug program, local composting facilities and their products and a list of the cooperative extension's educational opportunities and will encourage its municipal planning partners to include this information on their websites as well.</li> </ol>
2010-2011	<ol style="list-style-type: none"> <li>1. Guilford County will work with its municipal partners to successfully implement the state landfill ban on computer equipment and televisions.</li> <li>2. Guilford County will work with its municipal partners to develop a policy to reduce the toxicity of chemicals used by government agencies and facilities.</li> <li>3. Guilford County will expand public awareness of local businesses and service providers that incorporate "green" procedures and policies into their operations through a recognition program.</li> <li>4. Guilford County and its municipal partners will support, promote and expand NCDOT's Adopt-a-Highway program.</li> <li>5. Guilford County will work with its municipal partners to encourage the adoption of an environmentally preferable purchasing policy.</li> </ol>
2011-2012	<ol style="list-style-type: none"> <li>1. Guilford County will develop and enact a policy requiring County licensed garbage collectors to provide recycling collection, with minimum standards, and yard waste collection as part of their license to operate in Guilford County.</li> <li>2. Update Solid Waste Management Plan.</li> <li>3. Re-evaluate incineration options to determine cost effectiveness.</li> </ol>



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# APPENDIX A

## Resolutions to Adopt the 2009 Guilford County Solid Waste Management Plan Update

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**RESOLUTION TO ADOPT  
THE 2009 GUILFORD COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE**

WHEREAS, it is a priority of Guilford County to protect human health and the environment through the safe and effective management of solid waste; and

WHEREAS, better solid waste planning will provide more effective solid waste management, better utilization of natural resources, increased control of the cost of solid waste management; and

WHEREAS, North Carolina General Statute 130A-309.09A(b), requires each unit of local government, either individually or in cooperation with other units of local government, to develop a solid waste management plan, and to update that plan at least every three years; and

WHEREAS, the 2009 update to the Guilford County Solid Waste Management Plan is required to be submitted to the State of North Carolina by June 30, 2009, and must be approved and adopted by resolution prior to being submitted to the State; and

WHEREAS, Guilford County has taken the lead role in the development of this 2009 solid waste management plan update, in a cooperative effort with the Cities of Archdale, Greensboro and High Point, the Towns of Gibsonville, Jamestown, Oak Ridge, Pleasant Garden, Sedalia, Stokesdale, Summerfield and Whitsett; and

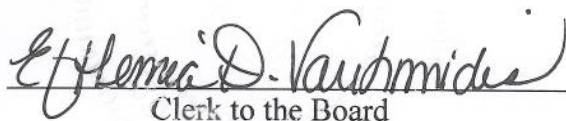
WHEREAS, all of these participating municipalities, through their governing bodies, have approved and adopted this 2009 solid waste management plan update by resolution;

NOW, THEREFORE, BE IT RESOLVED that the Guilford County Board of Commissioners hereby approves and adopts the 2009 Guilford County Solid Waste Management Plan Update.

Adopted this 4<sup>th</sup> day of June, 2009.

  
Chairman, Board of County Commissioners

Attest:

  
Clerk to the Board



## RESOLUTION APPROVING AND ENDORSING

### THE 2009 GUILFORD COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE

**WHEREAS**, it is a priority of Guilford county to protect the public health and the environment through the safe and effective management of solid waste; and

**WHEREAS**, better solid waste planning will provide more effective solid waste management, better utilization of natural resources, increased control of the cost of solid waste management; and

**WHEREAS**, North Carolina General Statute 130A-309.09A(B) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a solid waste management plan, and to update that plan at least every three years; and

**WHEREAS**, the 2009 update of the Guilford County Solid Waste Management Plan is required to be submitted to the State of North Carolina by June 30, 2009, and must be approved and adopted by resolution prior to being submitted to the State; and

**WHEREAS**, the City of Archdale was represented during the planning process and has been involved with the development of the solid waste management plan;

**NOW, THEREFORE, BE IT RESOLVED** that the City Council of the City of Archdale approves and endorses the 2009 Guilford County Solid Waste Management Plan Update.

Adopted this 28th day of April, 2009.

A handwritten signature in cursive script, reading 'Bert Lance Stone', written over a horizontal line.

Bert Lance Stone, Mayor

A handwritten signature in cursive script, reading 'Patsy Dougherty', written over a horizontal line.

ATTEST: Patsy Dougherty, City Clerk







## CITY OF HIGH POINT

### RESOLUTION APPROVING AND ENDORSING THE 2009 GUILFORD COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE

WHEREAS, it is a priority of Guilford County to protect the public health and the environment through the safe and effective management of solid waste; and

WHEREAS, better solid waste planning will provide more effective solid waste management, better utilization of natural resources, increased control of the cost of solid waste management; and

WHEREAS, North Carolina General Statute 130A-309.09A(B) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a solid waste management plan, and to update that plan at least every three years; and

WHEREAS, the 2009 update of the Guilford County Solid Waste Management Plan is required to be submitted to the State of North Carolina by June 30, 2009, and must be approved and adopted by resolution prior to being submitted to the State; and

WHEREAS, the City of High Point was represented during the planning process and has been involved with the development of the solid waste management plan;

NOW, THEREFORE, BE IT RESOLVED that the City Council of High Point approves and endorses the 2009 Guilford County Solid Waste Management Plan Update.

Adopted by the High Point City Council this 6<sup>th</sup> day of April, 2009.

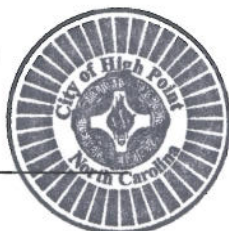
A handwritten signature in blue ink, reading "Rebecca R. Smothers".

Rebecca R. Smothers, Mayor

ATTEST:

A handwritten signature in blue ink, reading "Lisa B. Verling".

Lisa B. Verling, City Clerk



RECEIVED

APR 08 2009

Public Services Dept

**RESOLUTION APPROVING AND ENDORSING**  
**THE 2009 GUILFORD COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE**

WHEREAS, it is a priority of Guilford county to protect the public health and the environment through the safe and effective management of solid waste; and

WHEREAS, better solid waste planning will provide more effective solid waste management, better utilization of natural resources, increased control of the cost of solid waste management; and

WHEREAS, North Carolina General Statute 130A-309.09A(B) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a solid waste management plan, and to update that plan at least every three years; and

WHEREAS, the 2009 update of the Guilford County Solid Waste Management Plan is required to be submitted to the State of North Carolina by June 30, 2009, and must be approved and adopted by resolution prior to being submitted to the State; and

WHEREAS, the Town of Gibsonville was represented during the planning process and has been involved with the development of the solid waste management plan;

NOW, THEREFORE, BE IT RESOLVED that the Gibsonville Board of Aldermen of the Town of Gibsonville approves and endorses the 2009 Guilford County Solid Waste Management Plan Update.

Adopted this 6th day of April, 2009.



Leonard Williams, Mayor



  
Laurie Yarbrough, Town Clerk



**RESOLUTION APPROVING AND ENDORSING  
THE 2009 GUILFORD COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE**

WHEREAS, it is a priority of Guilford county to protect the public health and the environment through the safe and effective management of solid waste;

WHEREAS, better solid waste planning will provide more effective solid waste management, better utilization of natural resources, increased control of the cost of solid waste management;

WHEREAS, North Carolina General Statute 130A-309.09A(B) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a solid waste management plan, and to update that plan at least every three years;

WHEREAS, the 2009 update of the Guilford County Solid Waste Management Plan is required to be submitted to the State of North Carolina by June 30, 2009, and must be approved and adopted by resolution prior to being submitted to the State;

WHEREAS, the City of Greensboro was represented during the planning process and has been involved with the development of the solid waste management plan.


NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GREENSBORO:

That the 2009 Guilford County Solid Waste Management Plan Update is hereby approved and endorsed.

I, Elizabeth H. Richardson, City Clerk of the City of Greensboro do hereby certify the foregoing to be a true and exact copy of a resolution adopted by the City Council of the City of Greensboro at its regular meeting held on the 7<sup>th</sup> day of April 2009.

Witness my hand and corporate seal of the City of Greensboro, this the 30th day of April, 2009.

SEAL

  
Elizabeth H. Richardson  
City Clerk





# TOWN OF JAMESTOWN

Settled in 1752

Chartered in 1816

P.O. Box 848

Jamestown, North Carolina 27282

## RESOLUTION APPROVING AND ENDORSING THE 2009 GUILFORD COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE

WHEREAS, it is a priority of Guilford County to protect the public health and the environment through the safe and effective management of solid waste; and

WHEREAS, better solid waste planning will provide more effective solid waste management, better utilization of natural resources, increased control of the cost of solid waste management; and

WHEREAS, North Carolina General Statute 130A-309.09A(B) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a solid waste management plan, and to update that plan at least every three years; and

WHEREAS, the 2009 update of the Guilford County Solid Waste Management Plan is required to be submitted to the State of North Carolina by June 30, 2009, and must be approved and adopted by resolution prior to being submitted to the State; and

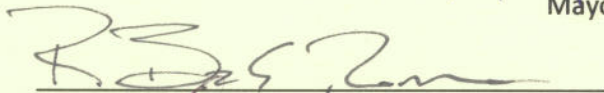
WHEREAS, the Town of Jamestown was represented during the planning process and has been involved with the development of the solid waste management plan;

NOW, THEREFORE, BE IT RESOLVED, that the Town Council of the Town of Jamestown approves and endorses the 2009 Guilford County Solid Waste Management Plan Update.

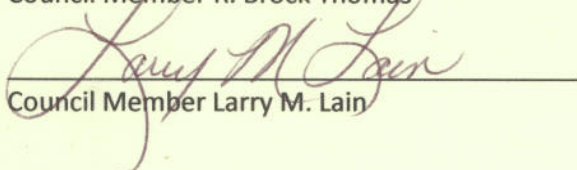
Adopted this the 21<sup>st</sup> day of april, 2009.



Mayor Keith L. Volz



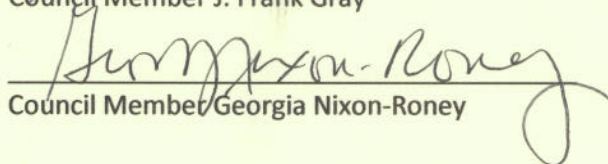
Council Member R. Brock Thomas



Council Member Larry M. Lain



Council Member J. Frank Gray



Council Member Georgia Nixon-Roney



## **TOWN OF OAK RIDGE**

### **RESOLUTION APPROVING AND ENDORSING**

#### **THE 2009 GUILFORD COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE**

**WHEREAS**, it is a priority of Guilford county to protect the public health and the environment through the safe and effective management of solid waste; and

**WHEREAS**, better solid waste planning will provide more effective solid waste management, better utilization of natural resources, increased control of the cost of solid waste management; and

**WHEREAS**, North Carolina General Statute 130A-309.09A(B) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a solid waste management plan, and to update that plan at least every three years; and

**WHEREAS**, the 2009 update of the Guilford County Solid Waste Management Plan is required to be submitted to the State of North Carolina by June 30, 2009, and must be approved and adopted by resolution prior to being submitted to the State; and

**WHEREAS**, the TOWN OF OAK RIDGE was represented during the planning process and has been involved with the development of the solid waste management plan;

**NOW, THEREFORE, BE IT RESOLVED** that the TOWN COUNCIL of the TOWN OF OAK RIDGE approves and endorses the 2009 Guilford County Solid Waste Management Plan Update.

Adopted this 2<sup>nd</sup> day of April, 2009.

Ray Combs, Mayor

ATTEST:

  
Town Clerk, Larry Harvell





**RESOLUTION APPROVING AND ENDORSING  
THE 2009 GUILFORD COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE**

**WHEREAS**, it is a priority of Guilford county to protect the public health and the environment through the safe and effective management of solid waste; and

**WHEREAS**, better solid waste planning will provide more effective solid waste management, better utilization of natural resources, increased control of the cost of solid waste management; and

**WHEREAS**, North Carolina General Statute 130A-309.09A(B) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a solid waste management plan, and to update that plan at least every three years; and

**WHEREAS**, the 2009 update of the Guilford County Solid Waste Management Plan is required to be submitted to the State of North Carolina by June 30, 2009, and must be approved and adopted by resolution prior to being submitted to the State; and

**WHEREAS**, the Town of Pleasant Garden was represented during the planning process and has been involved with the development of the solid waste management plan;

**NOW, THEREFORE, BE IT RESOLVED** that the Town Council of the Town of Pleasant Garden approves and endorses the 2009 Guilford County Solid Waste Management Plan Update.

Adopted this seventh day of April, 2009:

\_\_\_\_\_  
Anne Hice, Mayor



# Town of Sedalia

6121 Burlington Road • P.O. Box C • Sedalia, NC 27342 • (336) 449-1132 Office • (336) 449-1141 Fax

## **RESOLUTION APPROVING AND ENDORSING THE 2009 GUILFORD COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE**

**WHEREAS**, it is a priority of Guilford county to protect the public health and the environment through the safe and effective management of solid waste; and

**WHEREAS**, better solid waste planning will provide more effective solid waste management, better utilization of natural resources, increased control of the cost of solid waste management; and

**WHEREAS**, North Carolina General Statute 130A-309.09A(B) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a solid waste management plan, and to update that plan at least every three years; and

**WHEREAS**, the 2009 update of the Guilford County Solid Waste Management Plan is required to be submitted to the State of North Carolina by June 30, 2009, and must be approved and adopted by resolution prior to being submitted to the State; and

**WHEREAS**, the Town of Sedalia was represented during the planning process and has been involved with the development of the solid waste management plan;

**NOW, THEREFORE, BE IT RESOLVED** that the Sedalia Town Council of the Town of Sedalia approves and endorses the 2009 Guilford County Solid Waste Management Plan Update.

Adopted this 6<sup>th</sup> day of Apr, 2009.

ATTEST:



Cam Dungee, Town Clerk



Howard Morgan, Mayor





**TOWN OF STOKESDALE  
RESOLUTION APPROVING AND ENDORSING  
THE 2009 GUILFORD COUNTY  
SOLID WASTE MANAGEMENT PLAN UPDATE**

**WHEREAS**, it is a priority of Guilford county to protect the public health and the environment through the safe and effective management of solid waste; and

**WHEREAS**, better solid waste planning will provide more effective solid waste management, better utilization of natural resources, increased control of the cost of solid waste management; and

**WHEREAS**, North Carolina General Statute 130A-309.09A(B) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a solid waste management plan, and to update that plan at least every three years; and

**WHEREAS**, the 2009 update of the Guilford County Solid Waste Management Plan is required to be submitted to the State of North Carolina by June 30, 2009, and must be approved and adopted by resolution prior to being submitted to the State; and

**WHEREAS**, the Town of Stokesdale was represented during the planning process and has been involved with the development of the solid waste management plan.

NOW, THEREFORE, BE IT RESOLVED that the Town Council of the Town of Stokesdale approves and endorses the 2009 Guilford County Solid Waste Management Plan Update.

Adopted this 16<sup>th</sup> day of April, 2009.

  
Randle L. Jones Mayor

ATTEST:



  
Carolyn L. Joyner Town Clerk





**RESOLUTION  
APPROVING AND ENDORSING THE 2009 GUILFORD COUNTY  
SOLID WASTE MANAGEMENT PLAN**

**WHEREAS**, it is a priority of the Town of Summerfield to protect the public health and the environment through the safe and effective management of solid waste; and

**WHEREAS**, better solid waste planning will provide more effective solid waste management, better utilization of natural resources, increased control of the cost of solid waste management; and

**WHEREAS**, North Carolina General Statute 130A-309.09A(B) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a solid waste management plan, and to update that plan at least every three years; and

**WHEREAS**, the 2009 update of the Guilford County Solid Waste Management Plan is required to be submitted to the State of North Carolina by June 30, 2009, and must be approved and adopted by resolution prior to being submitted to the State; and

**WHEREAS**, the Town of Summerfield was represented during the planning process and has been involved with the development of the solid waste management plan;

**NOW, THEREFORE, BE IT RESOLVED** that the **Town Council** of the **Town of Summerfield** approves and endorses the 2009 Guilford County Solid Waste Management Plan Update.

Adopted on this the 14th day of April, 2009.

  
\_\_\_\_\_  
Mark E. Brown, Mayor

Attest:   
\_\_\_\_\_  
Valarie Halvorsen, Town Clerk



TOWN OF WHITSETT  
NORTH CAROLINA

**RESOLUTION APPROVING AND ENDORSING  
THE 2009 GUILFORD COUNTY SOLID WASTE MANAGEMENT PLAN UPDATE**

WHEREAS, it is a priority of Guilford county to protect the public health and the environment through the safe and effective management of solid waste; and

WHEREAS, better solid waste planning will provide more effective solid waste management, better utilization of natural resources, increased control of the cost of solid waste management; and

WHEREAS, North Carolina General Statute 130A-309.09A(B) requires each unit of local government, either individually or in cooperation with other units of local government, to develop a solid waste management plan, and to update that plan at least every three years; and

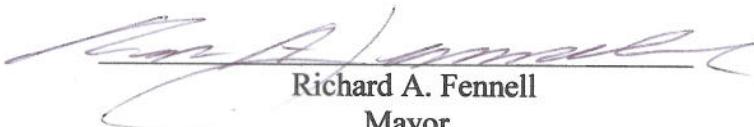
WHEREAS, the 2009 update of the Guilford County Solid Waste Management Plan is required to be submitted to the State of North Carolina by June 30, 2009, and must be approved and adopted by resolution prior to being submitted to the State; and

WHEREAS, the Town of Whitsett was represented during the planning process and has been involved with the development of the solid waste management plan;

NOW, THEREFORE, BE IT RESOLVED that the Town Council of the Town of Whitsett approves and endorses the 2009 Guilford County Solid Waste Management Plan Update.

Adopted this 14<sup>th</sup> day of April, 2009.

ATTEST:

  
Richard A. Fennell  
Mayor  
Town of Whitsett



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# APPENDIX B

## Notice of Public Meeting

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News & Record

Published by  
News & Record, Inc.  
Greensboro, North Carolina

AFFIDAVIT OF PUBLICATION

North Carolina, Guilford County

Before the undersigned, a Notary Public of said County and State, duly commissioned, qualified and authorized by law to administer oaths, personally appeared the Publisher's Representative who being first duly sworn, deposed and says:

1. That he/she is the Publisher's Representative of the Greensboro News & Record, Inc. a corporation, engaged in the publication of newspapers known as "News & Record", published, issued and entered as second class mail in the City of Greensboro in said County and State.
2. That he/she is authorized to make this affidavit and sworn statement; that the notice or other legal advertisement, a copy of which is attached hereto, was published in the News & Record on the dates listed below.
3. That the said newspaper (or newspapers) in which such notice, paper, document, or legal advertisement was published was, at the time of each and every such publication, a newspaper meeting all of the requirements and qualifications of Section 1-597 of the General Statutes of North Carolina and was a qualified newspaper within the meaning of Section 1-597 of the General Statutes of North Carolina.

Publisher's Representative

*Valerie McNeil*

Sworn to and subscribed before me, this 4th day of March, 2009.

Notary Public

*Valerie McNeil*

My commission expires: August 23, 2010

\*\*\*\*\*  
NOTARY PUBLIC  
VALERIE McNEIL  
GUILFORD COUNTY, NC  
My Commission Expires August 23, 2010  
\*\*\*\*\*

<u>Name</u>	<u>Ad #</u>	<u>Date</u>	<u>Edition</u>	<u>Class</u>	<u>PO</u>	<u>Ad Copy</u>
GUILFORD CO COMM & ECON D	31422525	03/04/09	News & Record	400	MTG 3/16/09	NOTICE OF PUBLIC MEETING Guilford County



**NOTICE OF  
PUBLIC MEETING****Guilford County Solid  
Waste Management  
Plan Update 2009**

Guilford County and its municipalities are required by state law to prepare a Solid Waste Management Plan, and to update that plan at least every three years. The current plan was adopted in June of 2006, and the next update is required by June 30, 2009. Solid waste goals involving reduction, collection, recycling, disposal, special wastes, illegal dumping/littering, composting and mulching, education, recycled product purchasing and disaster response will be discussed. The County encourages you to attend this meeting and to participate in the solid waste management planning process.

**DATE:** Monday, March 16, 2009

**TIME:** 4:00 p.m. to 7:00 p.m.

**PLACE:** Old Guilford County Courthouse, Blue Room, 1st Floor  
301 W. Market St., Greensboro, North Carolina

All citizens will be given an opportunity to be heard at this meeting. Those wishing to provide comments without attending the meeting may do so online at <http://www.co.guilford.nc.us/planning/cms/swmp/swmplan.html>.

Brenda Fox  
Interim Manager  
Guilford County



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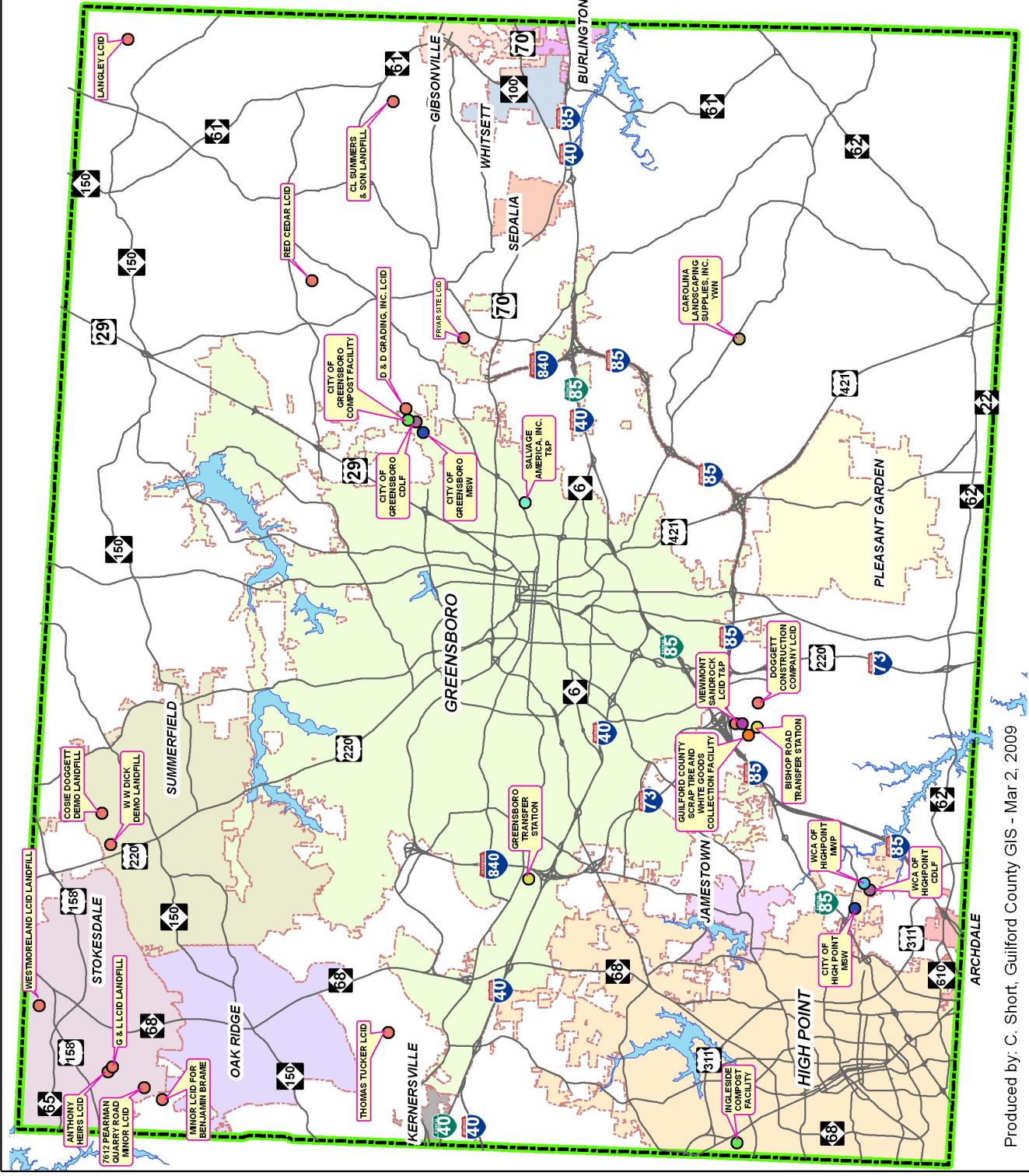
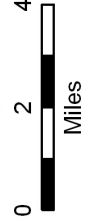
# APPENDIX C

## Map of Permitted Solid Waste Management Facilities in Guilford County

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**Legend**

- CDLF
- COMPOST
- LCID
- MSWLF
- MWP
- T&PN
- TIRETP
- TP
- TRANSFER
- YWN



Permitted Solid Waste Facilities in Guilford County			
FACILITY TYPE	FACILITY NAME	FACILITY ADDRESS	REMAINING CAPACITY
CDLF	WCA of High Point CDLF	5830 Riverdale Dr	estimated 31 years
CDLF	City of Greensboro CDLF	2503 White St	
COMPOST	Ingleside Compost Facility (City of High Point)	3001 Ingleside Dr	n/a
COMPOST	City of Greensboro Compost Facility	2503 White St	n/a
LCID	Langley LCID	7400 Brooks Bridge Rd	
LCID	Anthony Heirs LCID	7700 Anthony Rd	
LCID	Viewmont Sandrock Mine and LCID Landfill	4048 Viewmont Rd	
LCID	Benjamin Brame Minor LCID Landfill	8735 Warner Rd	
LCID	Fryar Site LCID	5233 McLeansville Rd	
LCID	Doggett Construction Company LCID	2075 Bishop Rd	
LCID	Cosie Doggett Demolition Landfill	2124 Scalesville Rd	
LCID	D & D Grading, Inc. LCID	1411 Rankin Mill Rd	
LCID	Westmoreland LCID Landfill	7984 Lester Rd	
LCID	C L Summers and Son Landfill	2359 Wagoner Rd	
LCID	G & L LCID Landfill	7690 Anthony Rd	
LCID	W W Dick Demolition Landfill	7965 Winfree Rd	
LCID	7612 Pearman Quarry Road Minor LCID	7612 Pearman Quarry Rd	
LCID	Thomas Tucker LCID	230 Marshall-Smith Rd	
LCID	Red Cedar LCID	5614 Country Hills Dr	
MSWLF	City of Greensboro MSW Landfill	2503 White St	6 years, if used for MSW
MSWLF	City of High Point Kersey Valley MSW Landfill	3748 East Kivett Dr	at least 12 years
MWP	WCA of High Point MWP	5830 Riverdale Dr	n/a
T&PN	Viewmont Sandrock LCID T&P	4048 Viewmont Rd	n/a
TIRETP	Guilford County Scrap Tire & White Goods Collection Facility	2138 Bishop Rd	n/a
TP	Salvage America, Inc. T&P	3001 Holts Chapel Rd	n/a
TRANSFER	City of Greensboro MSW Transfer Station	6310 Burnt Poplar Rd	n/a
TRANSFER	Republic Waste Bishop Road Transfer Station	2140 Bishop Rd	n/a
YWN	Carolina Landscaping Supplies, Inc. YWN	2544 Alamance Church Rd	n/a

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# APPENDIX D

## Waste Characterization Summary

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## WASTE CHARACTERIZATION SUMMARY

WASTE ESTIMATES BY SECTOR						
Measurement	MSW			Total MSW	C&D Waste	Total Waste Stream
	Residential Waste	Commercial Waste	Industrial Waste			
Percentage	29%	26%	23%	78%	22%	100%
Source: NC DENR FY 2007-08 County Waste Disposal Report.						

ESTIMATE OF RESIDENTIAL WASTE COMPOSITION	
Material	State Estimate (Percent) <sup>1</sup>
Paper	31%
Organics / Yard Waste	24%
Other <sup>2</sup>	13%
Plastics	10%
Glass	8%
Metals	8%
Cardboard	6%
<b>TOTAL</b>	<b>100%</b>
<sup>1</sup> Percentages derived from North Carolina Recycling and Solid Waste Management Plan, 1992, Volume 1, pages 6-17.	
<sup>2</sup> Other includes textiles, wood, and rubble/C&D debris.	

ESTIMATE OF COMMERCIAL AND INDUSTRIAL WASTE COMPOSITION		
Material	Commercial	Industrial
	State Estimate (Percent) <sup>1</sup>	State Estimate (Percent) <sup>1</sup>
Paper	26%	26%
Cardboard	26%	24%
Other <sup>2</sup>	15%	20%
Organics / Yard Waste	16%	10%
Plastics	8%	14%
Metals	6%	5%
Glass	3%	1%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>
<sup>1</sup> Percentages derived from North Carolina Recycling and Solid Waste Management Plan, 1992, Volume 1, pages 6-17.		
<sup>2</sup> Other includes textiles, wood, and rubble/C&D debris.		

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# APPENDIX E

## Waste Reduction Goal Sheet

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# WASTE REDUCTION GOAL SHEET

## NC LOCAL GOVERNMENT TEN YEAR SOLID WASTE MANAGEMENT PLAN

Local Government Name: Guilford County

Previously established waste reduction goal: 0 %

After considering your government's current and projected solid waste activities, resources, population, and economic growth have you reached your previously established goal? ☐ Yes ☒ No

Establish a new waste reduction goal: 0 %

### WASTE REDUCTION CALCULATION

To provide 10 years of solid waste management planning, as per G.S. 130A-309.09A(b), waste reduction goals need to be updated. Use the following chart to determine the tonnage needed to be diverted from landfills in order to reach the new waste reduction goal.

#### CALCULATION

**FY 2018-19**

1. Baseline year per capita disposal rate (FY 1991-1992 unless alternate approved by Section)	1.35
2. Percent waste reduction goal	0 %
3. Targeted per capita disposal rate (Subtract line 2 from 1.0 and multiply result by line 1)	1.35
4. Estimated population in the new waste reduction goal year (Available at Office of State Budget and Management website: <a href="http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/cpa2010p.html">Projected Annual County Population Totals 2010-2019</a> )	528,796
5. Projected tonnage for disposal at baseline disposal rate (Multiply line 1 by line 4)	713,487
6. Targeted annual tonnage for disposal (Multiply line 3 by line 4)	713,487
7. Targeted annual tonnage to reduce (Subtract line 6 from line 5)	0

Population Link: [http://www.osbm.state.nc.us/ncosbm/facts\\_and\\_figures/socioeconomic\\_data/population\\_estimates/demog/cpa2010p.html](http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/cpa2010p.html)

### WASTE REDUCTION PLAN

Given the targeted annual tonnage amount to be reduced, explain how you plan to reach the goal:

Guilford County has begun to have some success in lowering the per capita disposal rate from its high of 1.92 tons in FY 1999-2000 back down to the current 1.37 tons calculated in FY 2007-08. Our goal now is to be able to regain the benchmark rate of 1.35 tons per capita, as established by the state for FY 1991-92. Due to the current economic conditions, the County and its municipal partners realize that funding for new or expanded waste reduction programs will not be available, and funding for existing programs may be cut. Therefore, our waste reduction plan will focus on public education and outreach, as detailed in the 2009 Update planning elements.

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# APPENDIX F

## Planning Elements

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**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN  
PLANNING ELEMENTS**

**PLANNING YEARS 2009 THROUGH 2019**

***Reduction***

<b>COMPLETED ACTIONS</b>		<b>INCOMPLETE ACTIONS</b>		<b>NEW OR REVISED ACTIONS</b>		
KEY ACTIONS		KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR
Continued producing and distributing informational literature encouraging waste reduction. -- <i>Ongoing</i>		Develop a County policy encouraging deconstruction. <i>FY06-07</i>	Death of planning director and lack of a replacement has stalled the development of the policy.	Continue producing and expand efforts to distribute informational literature encouraging waste reduction.	Ongoing	
Produced and distributed the Guilford County Solid Waste Services Guide. -- <i>1/08 and ongoing</i>				Expand efforts to distribute the Guilford County Solid Waste Services Guide through town halls, County offices and other public facilities.	Ongoing	
Developed a web page to provide "green tips" to residents, including reduction, reuse and recycling information. -- <i>8/08 and ongoing</i>				Develop a County policy encouraging deconstruction, especially for redevelopment projects.	FY 09-10	
				Work with municipal partners to develop a policy to reduce the toxicity of chemicals used by government agencies and facilities.	FY 10-11	

## PLANNING YEARS 2009 THROUGH 2019

COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS	
KEY ACTIONS	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR
Through countywide meetings, municipal planning partners investigated the feasibility of a universal collection program and the role such a program could play in residential recycling. It was determined that universal collection was not desirable at this time, based on the successful collection operations by franchise holders and licensed residential garbage collectors. - 5/07			Develop and institute a policy requiring County licensed garbage collectors to provide recycling collection, with minimum standards, and yard waste collection as a part of their license to operate in Guilford County.  The City of Greensboro will revise its bulk collection procedure to be scheduled rather than a regular collection route.  The City of High Point will evaluate the possibility of reducing the frequency of curbside collection services to residents.	FY 11-12          FY 09-10       2009	

**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN  
PLANNING ELEMENTS**

**PLANNING YEARS 2009 THROUGH 2019**

***Recycling and Reuse***

<b>COMPLETED ACTIONS</b>		<b>INCOMPLETE ACTIONS</b>		<b>NEW OR REVISED ACTIONS</b>		
KEY ACTIONS	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR	
Began working with Guilford County Schools to promote internal and classroom recycling. – <i>Ongoing</i>	Establish economic development incentives for deconstruction in redevelopment projects.	County economic development staff was not receptive to the establishment of deconstruction incentives. As a result, no information was presented to elected officials for consideration.	Develop public education program for landfill bans on rigid plastic bottles, pallets, used oil filters, computer equipment and televisions.	FY 08-09, FY 09-10 & FY 10-11		
Worked with Guilford County Schools to have recycling designated as a part of the 5 <sup>th</sup> grade and 2 <sup>nd</sup> grade standard course of study. – 7/06			Work with local recycling centers to ensure that all rigid plastic bottles will be accepted for recycling and not considered contamination.	FY 08-09 & FY 09-10		
Worked with Planning Director to develop a County policy encouraging deconstruction up until the time of his death in 5/08; will continue when a new director is named. – <i>Ongoing</i>			Implement state landfill ban on rigid plastic bottles, pallets and used oil filters.	FY 09-10		
Initiated a pilot convenience site for residential recycling with sponsorship from Republic Waste. – 12/07 and ongoing			Continue to work with schools to promote administrative and classroom recycling.	FY 09-10 & Ongoing		
Began recycling at 3 County facilities; will continue bringing additional facilities online. – 2/08 and ongoing			Continue to work with private companies and local recycling facilities to develop convenience sites for recycling drop-off for residents.	FY 09-10 & Ongoing		
Began to expand public education programs for recycling. – 9/06 and ongoing			Implement state landfill ban on computer equipment and televisions.	FY 10-11		

**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN  
PLANNING ELEMENTS**

**PLANNING YEARS 2009 THROUGH 2019**

***Recycling and Reuse***

<b>COMPLETED ACTIONS</b>		<b>INCOMPLETE ACTIONS</b>		<b>NEW OR REVISED ACTIONS</b>		
KEY ACTIONS		KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR
<p>Began to promote recycling at public events. – <i>FY 06-07 and ongoing.</i></p> <p>Began to identify markets for recyclable materials and to compile a database for information on available markets. – <i>FY 07-08 and ongoing.</i></p> <p>Implemented an extensive public education program (including public meetings and web page) targeted toward affected businesses. Worked with service providers to successfully implement ABC Licensees' Container Recycling Mandate. – <i>FY 07-08</i></p>				Implement a recycling program at additional County offices and facilities.	FY 09-10 & Ongoing	

**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN  
PLANNING ELEMENTS**

**PLANNING YEARS 2009 THROUGH 2019**

***Composting and Mulching***

<b>COMPLETED ACTIONS</b>		<b>INCOMPLETE ACTIONS</b>		<b>NEW OR REVISED ACTIONS</b>		
KEY ACTIONS		KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR
Continued educational programs on backyard composting. -- <i>Ongoing</i>				List on county and municipal websites locations of government facilities where compost and mulch are available to the public.	FY 09-10	
Continued operations of the City of High Point's Ingleside Composting Facility. – <i>Ongoing</i>				Promote cooperative extension's backyard composting program through County and municipal websites.	FY 09-10	
Continued operations of the City of Greensboro's composting program. – <i>Ongoing</i>				Expand Christmas tree recycling drop-off program to include additional sites.	FY 09-10	
Investigated interest in pursuing grant funding for and promotion of a compost bin sale; postponed action based on consensus of municipal planning partners – 5/07				Monitor anticipated changes in state rules governing compost facilities.	FY 09-10 & Ongoing	
Municipal planning partners have worked to include mandating yard waste collection in their franchise agreements; no County policy decision regarding yard waste collection as a part of conjunction with licensing garbage collectors. – FY 07-08 and <i>ongoing</i>				Municipal partners will continue to add yard waste collection to their franchise agreements for solid waste and recycling.	FY 09-10 & Ongoing	

**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN**  
**PLANNING ELEMENTS**  
**PLANNING YEARS 2009 THROUGH 2019**

*Incineration with/without Energy Recovery*

COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS		
KEY ACTIONS		KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR
Re-evaluated incineration options and determined them to be cost prohibitive and detrimental to local air quality. – 1/09				Re-evaluate incineration options to determine cost-effectiveness and identify environmental liabilities.	FY 11-12	

**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN  
PLANNING ELEMENTS**

**PLANNING YEARS 2009 THROUGH 2019**

*Transfer Outside Geographic Area*

COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS		
KEY ACTIONS		KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR
<p>Republic Waste Services began operations of its MSW transfer station (project formerly listed as A-1 Sandrock, Inc.). – 11/04</p> <p>City of Greensboro began operations of its MSW transfer station.. – 9/06</p>				<p>No new transfer stations are currently being proposed, and no need for additional transfer stations has been identified at this time.</p>		

**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN**  
**PLANNING ELEMENTS**

**PLANNING YEARS 2009 THROUGH 2019**

*Disposal*

<b>COMPLETED ACTIONS</b>		<b>INCOMPLETE ACTIONS</b>		<b>NEW OR REVISED ACTIONS</b>		
KEY ACTIONS		KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR
WCA, Inc. (formerly MR&R of Guilford) C&D Treatment and Processing includes a new C&D landfill.		A-1 Sandrock, Inc. plans to open a C&D landfill.	A new C&D landfill has been permitted but has not become operational.	City of High Point's Kersey Valley landfill will continue MSW disposal throughout the 10-year planning period.	FY 09-10 and Ongoing	
City of Greensboro discontinued MSW disposal at its White Street landfill. – 1/07				The City of Greensboro will have additional C&D landfill capacity permitted within the next several years.	FY 09-10 and Ongoing	
				WCA, Inc. C&D Treatment and Processing Facility will continue operations.	FY 09-10 and Ongoing	
				Continue regular County solid waste management meetings and regional solid waste management meetings.	FY 09-10 and Ongoing	
				Continue to engage regional planning partners in discussion about a long-range, regional plan for disposal.	FY 09-10 and Ongoing	



**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN**  
**PLANNING ELEMENTS**

**PLANNING YEARS 2009 THROUGH 2019**

*Education with the Community and Through the Schools*

<b>COMPLETED ACTIONS</b>	<b>INCOMPLETE ACTIONS</b>		<b>NEW OR REVISED ACTIONS</b>		
	KEY ACTIONS	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE ESTIMATED TONS DIVERTED IN 10TH YEAR
Continued to focus efforts on educating the residential, commercial, and industrial sectors about the benefits of recycling. – <i>FY 06-07 and Ongoing</i>	Explore shared funding of education programs by participating jurisdictions.	Shared funding not pursued due to national economic crisis.	Continue to provide a County-sponsored recycling presentation for elementary schools throughout the County.	FY 09-10 & Ongoing	
Continued educational programs on grass-cycling and backyard composting through the Cooperative Extension. – <i>FY 06-07 and Ongoing</i>	Work with Guilford County Schools to explore the development of an elementary recycling curriculum.	The school system was open to allowing recycling presentations to be provided in individual schools and classrooms, but not to the development of a standard recycling curriculum.	Seek grant funding to expand existing education programs.	FY 09-10 & Ongoing	
Produced and distributed the Guilford County Solid Waste Services Guide. <i>1/08 and ongoing.</i>			Expand public awareness of businesses and service providers that incorporate green procedures and policies into their operations by developing a recognition program using the County's "Measure Up" campaign, media and website outlets.	FY 10-11	
Initiated web-based educational outreach to residents using online accessible Solid Waste Services Guide and through weekly tips and updates on special clean-up events. – <i>8/08 and ongoing.</i>			Work with civic groups to provide recycling education to their memberships and integrate recycling education into their events.	FY 09-10 & Ongoing	
			Continue America Recycles Day event for elementary schools.	FY 09-10 & Ongoing	

**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN  
PLANNING ELEMENTS**

**PLANNING YEARS 2009 THROUGH 2019**

*Education with the Community and Through the Schools*

COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS		
KEY ACTIONS	KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR	
			Develop and implement a comprehensive public education program for landfill bans on rigid plastic bottles, pallets, used oil filters, computer equipment and televisions.	FY 08-09, FY 09-10 & FY1 0-11		

**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN  
PLANNING ELEMENTS**

**PLANNING YEARS 2009 THROUGH 2019**

*Special Waste*

<b>COMPLETED ACTIONS</b>		<b>INCOMPLETE ACTIONS</b>		<b>NEW OR REVISED ACTIONS</b>		
KEY ACTIONS		KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR
Continued to provide e-waste disposal for residents through the Household Hazardous Waste Disposal Programs. -- <i>Ongoing</i>				Continue the collection of e-waste and televisions in conjunction with the Household Hazardous Waste Disposal Program and expand public education about the upcoming landfill bans on computer equipment and televisions.	FY 09-10 & Ongoing	
Evaluated the white goods convenience site pilot program and found a significant drop in need for service, primarily due to high metal prices. Bi additional convenience sites for white goods drop-off planned at this time.				Make the Guilford County-Pleasant Garden E-Cycling 2009 an annual event.	FY10-11 and Ongoing	
				Promote NCDA-sponsored pesticide disposal through additional clean-up events.	FY 09-10 & Ongoing	
				Continue Guilford County spring clean-up event for disposal of scrap tires, white goods and household hazardous waste for residents, and expand the program to a spring date in High Point and a fall date at Guilford College.	FY 08-09 & FY 09-10	

**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN**  
**PLANNING ELEMENTS**

**PLANNING YEARS 2009 THROUGH 2019**

***Illegal Disposal/Litter***

<b>COMPLETED ACTIONS</b>		<b>INCOMPLETE ACTIONS</b>		<b>NEW OR REVISED ACTIONS</b>		
KEY ACTIONS		KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR
Continued the coordination of the Prison Farm cleanup program. <i>Ongoing</i>		Implement County surveillance program for illegal dumping.	Change in personnel and equipment problems led to a postponement of the implementation. The program is expected to begin by the close of FY 08-09.	Work with small towns to use surveillance program at identified illegal dumping sites.	FY 09-10 & Ongoing	
Continued cleanup and educational programs sponsored by Guilford County, City of Greensboro, City of High Point, and NCDOT. <i>Ongoing</i>				Expand County solid waste website to include a page devoted to illegal dumping and solid waste enforcement.	FY 09-10	
Continued special cleanup programs. <i>Ongoing</i>		Support, promote and expand NCDOT's Adopt-a-Highway program in Guilford County.	Due to the inability to interface with NCDOT program administrator, no progress was made on this key action.	Support, promote and expand NCDOT's Adopt-a-Highway program in Guilford County.	FY 10-11 & Ongoing	
Considered Guilford County and small-town participation in Keep America Beautiful as an affiliate. Due to high cost involved, a decision was made to support existing Greensboro and High Point affiliate programs. <i>FY 07-08</i>				Promote the NC DOT Swat-A-Litterbug program through community outreach efforts and on local and municipal government websites.	FY 09-10 & Ongoing	
				Continue to work with Greensboro Beautiful and Keep High Point Beautiful to promote anti-litter education and outreach.	FY 09-10 & Ongoing	

**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN**  
**PLANNING ELEMENTS**

**PLANNING YEARS 2009 THROUGH 2019**

***Purchasing Recycled Products***

<b>COMPLETED ACTIONS</b>		<b>INCOMPLETE ACTIONS</b>		<b>NEW OR REVISED ACTIONS</b>		
KEY ACTIONS		KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR
Guilford County reaffirmed its recycling and waste reduction policy through all departments of the County government. <i>12/05</i>				Continue to work with DPPEA to develop a training program about recycled products and related economic and environmental issues.	FY 09-10 & Ongoing	
Worked with County Purchasing Department to develop a listing of recycled products available for purchase by County offices and facilities. <i>FY 07-08</i>				Continue to expand the opportunity for County EPP purchasing.	FY 09-10 & Ongoing	
Worked with the County Purchasing Department to develop a list of qualified vendors of recycled products for use by County departments and purchasing agents. <i>FY 07-08 and ongoing</i>				Work with small towns to encourage EPP policy.	FY 10-11	
Began work with County Purchasing Department to analyze purchasing and bid opportunities based on EPP criteria. <i>FY 08-09 and ongoing</i>						

**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN  
PLANNING ELEMENTS**

**PLANNING YEARS 2009 THROUGH 2019**

***Disaster Response***

<b>COMPLETED ACTIONS</b>		<b>INCOMPLETE ACTIONS</b>		<b>NEW OR REVISED ACTIONS</b>		
KEY ACTIONS		KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR
Updated list of local private LCID landfills at which vegetative waste could be disposed. -- 8/08		Develop alternative disaster debris sites as needed to supplement the current listing.	Insufficient staff time to work on the project.	The County will work with local NC DENR staff and municipal partners to have disaster debris sites evaluated and approved.	FY 09-10	
Developed an animal mortality emergency response plan and included that as an addendum to the updated solid waste management plan. – 12/06				Update Solid Waste Management Plan.	As needed, but NLT 6/12	
Identified sites suitable for use as temporary disaster debris storage areas. – FY 08-09						
Updated Solid Waste Management Plan. – 6/09						



**NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN  
PLANNING ELEMENTS**

**PLANNING YEARS 2009 THROUGH 2019**

*Abatement of Abandoned Mobile Homes*

COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW OR REVISED ACTIONS		
KEY ACTIONS		KEY ACTIONS	WHY NOT COMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10TH YEAR
				Work with municipal partners to evaluate the issue of abandoned mobile homes in Guilford County.	FY 09-10	
				Develop a plan for the abatement of abandoned mobile homes in Guilford County, based on results of the evaluation.	FY 09-10 & FY 10-11	

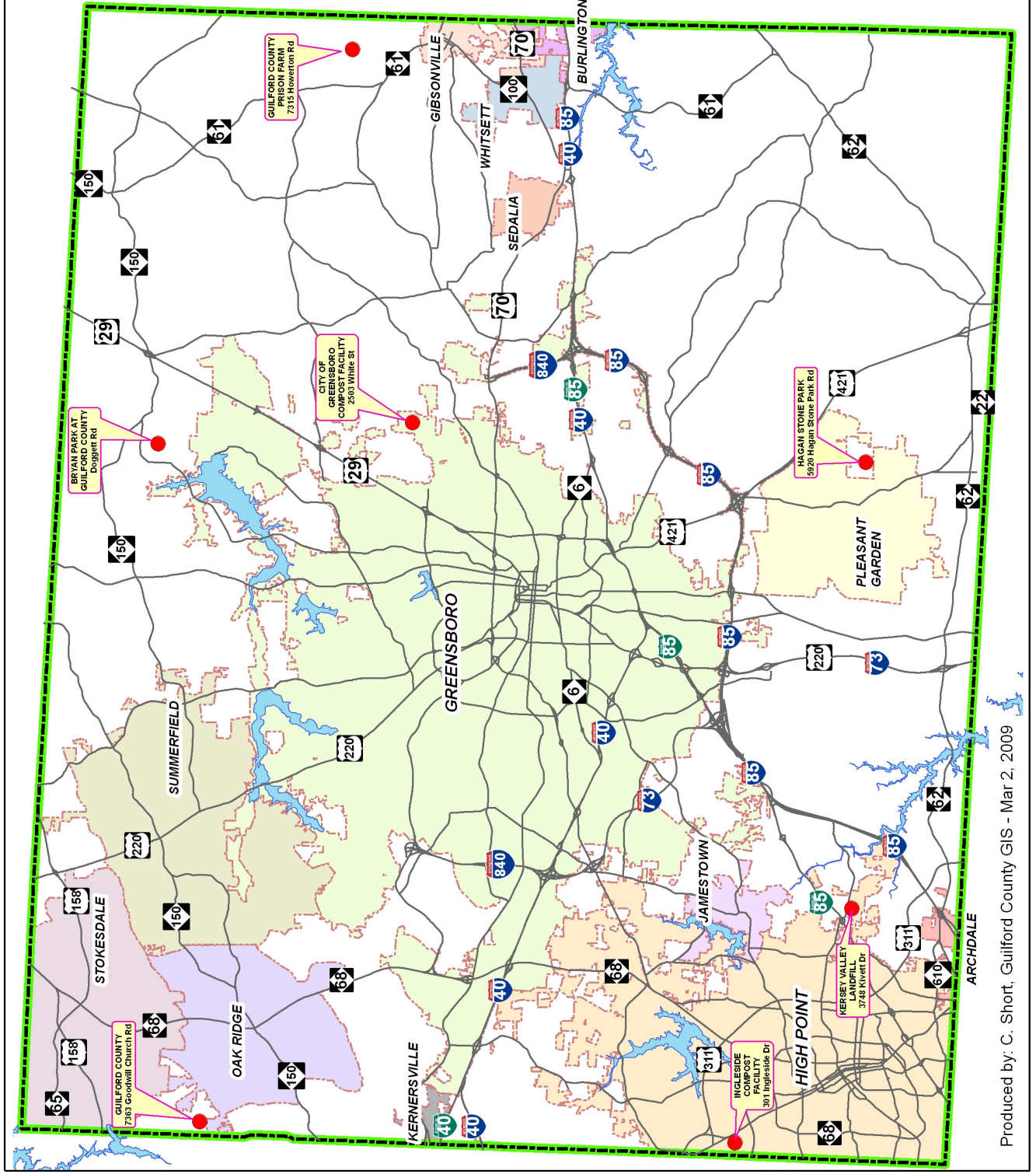
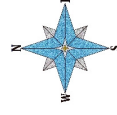
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# APPENDIX G

## Map of Identified Temporary Disaster Debris Storage Sites in Guilford County

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# Identified Temporary Disaster Debris Storage Sites



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# APPENDIX H

## Guilford County Recycling and Waste Prevention Policy

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# GUILFORD COUNTY RECYCLING AND WASTE PREVENTION POLICY

## Purpose

Recycling and waste prevention are important ingredients of responsible government. Even though Guilford County implemented a successful office recycling campaign in 1994, a written policy was not included in the program. The following will serve as the foundation of this policy.

Each Guilford County Department shall make every effort to reduce the amount of solid waste generated and shall recycle or reuse all materials with this capability. Each County Department shall also adhere to proper disposal of bio-wastes and hazardous wastes. Department Directors shall educate each employee as to the content and practice of this policy.

## General Correspondence and Publications

When formatting general correspondence and publications, practice the following whenever possible:

- Screen reports and lists to reduce copies.
- Use GroupWise or e-mail.
- Use recycled paper when feasible.
- Decrease margin allowances.
- Use double-sided copying for multiple pages.
- Avoid multiple pages.
- Recycle computer printer and fax machine powder cartridges.
- Single space letters and documents.
- Show the maximum number of slides per page during presentations.

## Request For Proposals

The first item to be listed under proposal submission requirements is the following statement:

*Proposals are encouraged to be compatible with Guilford County's office paper recycling program. They should be printed on recycled paper; copied front and back, three-hole punched, and stapled in the upper left-hand corner. Three-ring notebooks, spiral bindings, plastic covers, and any other materials contributing to the County's waste stream are not encouraged, but should be reusable.*

RFPs for construction, demolition, or renovation of County facilities must include an additional statement that encourages the vendor to make a good faith effort to reduce, recycle, and reuse building materials. Vendors shall incorporate recycled asphalt into paving projects and use energy efficient electrical equipment.

### Purchasing Recycled Products

Products containing recycled materials are to be given preference over those made from virgin materials if the recycled products are of equal quality and if the purchase does not conflict with existing budgetary, operational, or purchasing guidelines. Generally, if the cost of the recycled product does not exceed the cost of the virgin product by more than 5% to 10%, Departments are authorized to request that the recycled product be purchased. Consideration shall be given to durable products and items with minimal packaging.

Whenever possible, Departments shall reuse partitions and furniture and shall purchase moveable partitions instead of fixed partitions. Chairs should be reupholstered and tables refinished as opposed to buying new ones. The use of recycled compost for landscaping is also recommended. The Purchasing Department shall authorize final approval of purchase orders.



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# APPENDIX I

## Guilford County Scrap Tire Disposal Policy

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## Guilford County Scrap Tire Disposal Policy

Guilford County will provide for the disposal of scrap tires at the Guilford County Scrap Tire and White Goods Collection Facility (facility), located at 2138 Bishop Road, Greensboro, in accordance with North Carolina General Statutes, GS 130A-309.51 through 130A-309.63, governing scrap tire disposal. Scrap tires will be accepted for disposal from residential and business customers. All customers will be required to complete a North Carolina Scrap Tire Certification (SCT) form at the time the scrap tires are presented at the facility for disposal. The following criteria will be used to determine whether or not scrap tires are eligible for free disposal. If tires are determined to be ineligible for free disposal, customers shall pay a fee equal to the current cost of disposal at the time scrap tires are presented for disposal. At the discretion of the facility operator, any scrap tires eligible for free disposal that are found to contain dirt, stone, water or other foreign materials may be required to be cleaned of these materials prior to being presented for disposal. Any ineligible scrap tires found to contain dirt, stone, water or other foreign materials may be charged at the per pound rate at the discretion of the facility operator.

### Residential Customers:

A one-time allowance per residence of 5 passenger vehicle-sized tires will be accepted at the facility for disposal at no charge. Residents will be encouraged to leave scrap tires with the retailer at the time their replacement tires are purchased and their scrap tire disposal tax is paid. At the time the tires are presented for disposal, residents will complete an SCT form. The information contained on this SCT form will be logged into the facility database with the name and property address.

After having used the one-time allowance of 5 tires, residents will be required to pay an amount equal to the current cost of the tire disposal. In no instance will residents be permitted to dispose of heavy truck or off-road tires at no charge. The current disposal charges for tires ineligible for free disposal will be posted at the facility.

### Commercial Customers:

Businesses generating scrap tires (scrap tire generators) may dispose of them at the facility based on the following conditions:

1. Any scrap tire generator, including tire retailers, businesses with fleet vehicles, junk yards, scrap tire haulers and used tire retailers, presenting scrap tires at the facility for free disposal must provide the facility operator with a copy of the current business license, or other acceptable proof of permission to operate under state, local or municipal government statutes, and federal tax identification number.
2. Scrap tire generators (business owners or employees) may bring scrap tires directly to the facility for disposal. Scrap tire generators may elect to hire a state-registered scrap tire hauler to bring scrap tires to the facility for disposal. It is the responsibility of the scrap tire generator to ensure that any non-employee hauling his/her scrap tires is registered with the State of North Carolina. A registered scrap tire hauler should be required to provide the scrap tire generator with a copy of his/her current North Carolina registration certificate. Registration certificates expire annually. Any scrap tire hauler not in possession of a current registration certificate will not be permitted to dispose of any scrap tires at the facility.
3. The scrap tire generator must complete an SCT, including the number of tires being presented for disposal, the dates during which the scrap tires were accumulated and the breakdown of tires by type, each time scrap tires are brought to the facility for disposal. If the scrap tire generator is transporting his/her own scrap tires to the facility for disposal, he/she must complete parts I and II of the SCT form, signing and dating each. If the scrap tire generator hires a registered scrap tire hauler to transport his/her tires to the facility, the scrap tire generator must complete and sign part I of the SCT form, and the registered tire hauler must complete and sign part II of the SCT form.

4. Scrap tire generators that sell tires and that collect the NC scrap tire disposal tax at the point of sale will be permitted to dispose of those tires they accumulate when selling replacement tires at no cost.
5. Scrap tire generators are required to maintain, for a period of at least three (3) years, records of all tire purchases and sales, scrap tire disposal tax collection records and copies of tax forms E500G, as evidence of submission to the NC Department of Revenue, and copies of all completed SCT's. These records must be available to County staff if and when requested, to establish the eligibility of scrap tires for free disposal.
6. Junk yards may bring scrap tires to the facility for disposal. In order for junk yards to dispose of scrap tires at no charge, acceptable documentation must be provided to the facility operator to establish the number of tires eligible for free disposal. Copies of North Carolina vehicle titles, complete with signatures and date of transfer are considered to be acceptable documentation. Crushing receipts may be deemed acceptable, provided they are dated within 120 days of the disposal date, include the name, address and telephone number of the crushing company and a certified weight and/or a count of the vehicles being crushed. In either case, junk yards must provide the facility operator with a count of the total number of scrap tires being brought for disposal in advance of unloading any scrap tires at the facility.
7. Used tire dealers may bring scrap tires to the facility for disposal. In order for used tire dealers to dispose of scrap tires at no charge, the following records must be maintained and, if requested, made available to County staff to verify eligibility for free disposal: a completed SCT from the original scrap tire generator for all scrap tires purchased for the purpose of resale as used tires; records of all used tire sales. Any scrap tires culled from those obtained from a scrap tire generator for resale, that are later determined to be unacceptable for resale, are not eligible for free disposal. A fee equal to the current cost of disposal must be paid to the facility at the time of disposal.
8. Businesses, including contractors, developers and owners of rental properties, whether residential or commercial, that acquire scrap tires through the clean-up of properties are not eligible to dispose of scrap tires at no charge.
9. Scrap tires must be disposed of in a timely manner. A maximum of 500 scrap tires may be presented for disposal by or on behalf of a scrap tire generator at one time.

### **Farm Tires:**

Tires used in the operation of a bona fide farm are eligible for free disposal. Generally, farms must be at least ten (10) acres in size, and must be actively engaged in agriculture. Farms no longer active may seek permission to dispose of accumulated tires at no charge by contacting the facility operator and providing ownership information and property address. A decision as to the eligibility of tires for free disposal will be based on the decision of the scrap tire program coordinator for NC Department of the Environment and Natural Resources.

### **Disposal of Cut Tires and Tire Parts and Pieces:**

Only whole tires, including tread and sidewalls, will be accepted at the facility for disposal at no charge. Cut tires and tire parts and pieces are permitted to be disposed of in MSW landfills, and therefore will be not accepted at the facility for disposal at no charge. Customers wishing to dispose of cut tires and parts and pieces of tires at the facility may pay the current cost per pound for disposal.

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# APPENDIX J

## Guilford County Animal Mortality Emergency Response Plan

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# ANIMAL MORTALITY EMERGENCY RESPONSE PLAN

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## Introduction

In October of 2006, the North Carolina Department of the Environment and Natural Resources Division of Waste Management determined that every County's Solid Waste Management Plan be required to address emergency disposal needs arising from an animal mortality event such as infectious disease (i.e. avian flu) or natural disasters. Appropriate and effective disposal methods are critical to maintaining the public health, animal health and environmental quality. Based on information and recommendations provided by the United States and North Carolina Departments of Agriculture and the United States Environmental Protection Agency, Guilford County will follow the policy and procedures outlined below in the event of an animal mortality emergency.

## Reporting Requirements

- If any of the following reportable diseases or any foreign animal disease is suspected, pertinent information should be immediately reported by telephone to the Guilford County Department of Public Health at (336) 641-7777 and to NCDA&CS, Animal Health Programs at (919) 733-7601.
- If Psittacosis, Rabies, or Encephalitis is suspected, also contact the Veterinary Public Health Office at (919) 707-5900.
- WEST NILE VIRUS (WNV) - In North Carolina, state health officials urge people to report dead birds to the Public Health Pest Management Section by calling (877) 790-1747 or sending e-mail to ncwnv@ncmail.net. An online form can be filled out on DENR's Web site. Crows, blue jays and hawks seem to be the most susceptible.

### 02 NCAC 52C .0603 REPORTABLE DISEASES

All persons practicing veterinary medicine in North Carolina shall report the following diseases and conditions to the State Veterinarian's office by telephone within two hours after the disease is reasonably suspected to exist:

- (1) Anthrax;
- (2) Avian Chlamydiosis\* (Psitticosis, Ornithosis);
- (3) Avian Encephalomyelitis;
- (4) Avian Influenza (High Pathogenic);
- (5) Avian Influenza (Low Pathogenic);
- (6) Brucellosis (livestock only);
- (7) Classical Swine Fever (Hog Cholera);
- (8) Contagious Equine Metritis;
- (9) Echinococcus;
- (10) Equine Encephalomyelitis\* (including Eastern Equine Encephalomyelitis, Venezuelan Equine Encephalomyelitis, Western Equine Encephalomyelitis, and St. Louis Encephalomyelitis);

- (11) Equine Infectious Anemia;
  - (12) Exotic Newcastle Disease;
  - (13) Foreign Animal Diseases (including, in addition to those listed in this Rule, any disease believed to be absent from the United States and its territories);
  - (14) Fowl Typhoid (*Salmonella gallinarum*);
  - (15) Infectious Laryngotracheitis (other than vaccine induced);
  - (16) Leishmaniasis;
  - (17) *Mycoplasma gallisepticum*/*Mycoplasma synoviae*;
  - (18) Paramyxovirus (other than Newcastle; includes menangle virus);
  - (19) Plague\* (*Yersinia pestis*);
  - (20) Pseudorabies;
  - (21) Pullorum (*Salmonella pullorum*);
  - (22) Q fever\* (*Coxiella burnetii*);
  - (23) Rabies (equine and livestock only);
  - (24) Scabies (cattle and sheep only);
  - (25) Screw Worm (Exotic myiasis);
  - (26) Transmissible spongiform encephalopathies (including Bovine Spongiform Encephalopathy, Chronic Wasting Disease, and scrapie);
  - (27) Tuberculosis;
  - (28) Tularemia\* (*Francisella tularensis*);
  - (29) Vesicular Disease (Foot and Mouth, Vesicular Stomatitis, Vesicular Exanthema, Swine Vesicular Disease); and
  - (30) West Nile (domestic animals only).
- \* These diseases must also be reported to the Veterinary Public Health Program (919) 707-5900.
  - Refer to the State Veterinarian's website to ensure up to date information at [www.ncagr.com/vet/vetdis.htm](http://www.ncagr.com/vet/vetdis.htm).
  - History Note: Authority G.S. 106-307.2;  
Temporary Adoption Effective December 1, 2002;  
Effective August 1, 2004.

### Disposal Options

The following is a brief summary of poultry mortality disposal methods in North Carolina, as specified on the North Carolina Department of Agriculture and Consumer Services website ([www.ncagr.com/vet/PoultryDisposal.htm](http://www.ncagr.com/vet/PoultryDisposal.htm)). All disposal must occur within 24 hours.

1. Burial: Not closer than 300 feet to a flowing stream or public body of water. Should be at least three (3) feet above water table and covered with three (3) feet of soil. Can be used anywhere soil conditions allow, primarily for emergency situations. Not recommended for disposal of normal daily mortality.
2. Incineration: Any commercial unit that will completely incinerate the birds. Should be sure they meet local and state air quality requirements. Good procedure anywhere in the state.
3. Rendering: Must be done by a licensed renderer or collector. Care must be taken not to spread disease from farm to farm. Freezing mortality prior to rendering is allowed. Can be a satisfactory method anywhere in the state.



4. Disposal Pit: The bottom of the pit should be at least three (3) feet above the water table. Not a satisfactory procedure in most of Eastern North Carolina and other locations with a high water table.
5. Composter: Requires a permit from the North Carolina Department of Agriculture and Consumer Services. Good procedure in any part of the state.
6. Digestion: Requires a permit from the North Carolina Department of Agriculture and Consumer Services. Permits are limited to one (1) year but can be extended. Generally less satisfactory than other methods of disposal. Can be used anywhere in the state.

Other disposal methods require a special permit from the State Veterinarian's office.

### County Disposal Policy and Plan Implementation

Guilford County currently has two MSW landfills in operation: White Street Landfill, owned and operated by the City of Greensboro; and Kersey Valley Landfill, owned and operated by the City of High Point. Neither of these facilities will accept animal carcasses that result from an outbreak of infectious disease, nor will they accept more than a small quantity of animal carcasses resulting from natural causes.

Based on the recommendations of the State Veterinarian, in-house composting may be the best method available for large-scale disposal. In-house composting offers the following advantages:

- An initial pathogen kill takes place at the site, therefore eliminating movement and spreading of the infectious organism and resulting in a biosecure procedure.
- A quick response time results, based on the likely use of on-site personnel and equipment to complete the procedure. No specialized equipment or personnel are required.
- This quick response time minimizes the need for response crews at the scene, freeing them to deal with other premises and situations.
- Because no specialized equipment or personnel are required, in-house composting provides a cost-effective disposal method.
- In-house composting provides an environmentally friendly response, in that the infectious agent is contained within the facility or property where the outbreak originated, any leachate is absorbed and all emissions are bio-filtered through bedding material.

In the event of an animal mortality emergency, Guilford County will immediately notify the State Veterinarian and seek guidance as to the best way to proceed with disposal. Response to any such emergency will be coordinated through the Guilford County Department of Public Health, following the procedures set forth in the Guilford County Department of Public Health All Hazards Plan.

# ANIMAL MORTALITY EMERGENCY RESPONSE PLAN

---

## Introduction

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- (8) Contagious Equine Metritis;
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- (11) Equine Infectious Anemia;
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  - (13) Foreign Animal Diseases (including, in addition to those listed in this Rule, any disease believed to be absent from the United States and its territories);
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5. Composter: Requires a permit from the North Carolina Department of Agriculture and Consumer Services. Good procedure in any part of the state.
6. Digestion: Requires a permit from the North Carolina Department of Agriculture and Consumer Services. Permits are limited to one (1) year but can be extended. Generally less satisfactory than other methods of disposal. Can be used anywhere in the state.

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- A quick response time results, based on the likely use of on-site personnel and equipment to complete the procedure. No specialized equipment or personnel are required.
- This quick response time minimizes the need for response crews at the scene, freeing them to deal with other premises and situations.
- Because no specialized equipment or personnel are required, in-house composting provides a cost-effective disposal method.
- In-house composting provides an environmentally friendly response, in that the infectious agent is contained within the facility or property where the outbreak originated, any leachate is absorbed and all emissions are bio-filtered through bedding material.

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